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LECTURES

ON

DISEASES OF THE BRAIN AND NERVOUS SYSTEM,

NOW IN THE COURSE OF DELIVERY IN THE UNIVERSITY OF PARIS.

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LECTURE V.

INFLAMMATION OF THE SPINAL MARROW.

IT has long been known, gentlemen, that the contents of the vertebral canal are subject to inflammation, as well as the contents of the cranium, but it is only within latter years that the disease has been studied with great care and attention.

Inflammation of the spinal marrow, known by the name of *myelite* in the important work of M. OLLIVIER, may be distinguished into two forms, the acute and chronic, but instead of pursuing each of these forms separately, I shall lay before you a general idea of both together, taking care to dwell on the characteristic points that are peculiar to each.

The Anatomical Characters of Myelite,

or inflammation of the spinal marrow, are the same as in encephalitis; it is, therefore, unnecessary to recur to them here; you have the same injection and thickening of the membranes; the same induration or ramollissement of the nervous substance; the same suppuration in the interior of both organs: indeed, this is a necessary consequence from their identity of structure. However, diseases do not occur with the same frequency in the one as in the other. Abscess of the substance of the spinal marrow is a lesion which we have not many opportunities of seeing. M. VELPEAU published not long ago a striking example of this affection. From the united effects of ramollissement and suppuration taking place in the substance of the spinal chord, and gradually operating its destruction, we sometimes have a very remarkable circumstance produced, viz., the nearly complete separation of the spinal marrow into two distinct parts. In some cases the abscess has been found so extensive, that the superior and inferior portions of the chord were merely held together by a few ragged shreds. Of this we have more than one example in the science.

The lesions accompanying inflammation of the spinal marrow may vary in seat, from one extremity of the chord to the other. The myelitis may be general, or it may be partial, and the latter form is fortunately much more frequently observed than the former. When the myelite is thus partial, it may occupy any portion of the chord; but it is usual to distinguish it into three principal forms, as it may affect a portion of the spinal marrow corresponding to the *cervical*, the *dorsal*, or the *lumbar* regions. Again, whatever part of the length of the chord may be involved in inflammation, this latter may occupy either the whole thickness of the chord, or its anterior, or finally, its posterior column only. All these subdivisions are not made for the sake of arrangement: they will present themselves to you in practice, and are of importance to be noted, because in many cases they give an explanation of the nature of the symptoms we observe.

Besides the divisions which we have just pointed out, the inflammation may engage either the white or the gray substance of the spinal marrow; the latter is much more frequently attacked than the former; and when the inflammation occupies the centre of the chord, giving rise to a softening of its substance and destruction of the nervous tissue, we may have a vacuum produced, or a true canal, analogous to the normal one which exists at a certain period of fœtal life. I had an opportunity once of seeing a case of this kind in an old man: the centre of the chord contained a canal hollowed out by the suppuration, and which at first sight might have been mistaken for a natural cavity.

The Causes of Myelite

are the same as those of encephalitis. Inflammation of this portion of the nervous centre may equally be produced by external violence, such as blows, falls on the back, &c. It is also frequently produced by disease in the neighbouring parts, especially in the bones comprising the vertebral column. Finally, inflammation may be occasioned simply by too strong an action of the part. You know that encephalitis is sometimes occasioned by intense study, over-exercise of the intellectual faculties, violent passion, &c.; in the same way, neglect may be produced in cases where the action of the spinal marrow is carried to a high degree of intensity. Thus in animals which have been over-worked, or which are compelled to make violent and long-continued muscular efforts, M. Dupuy has found more or less trace of inflammation of the spinal chord after death.

The Symptoms of Myelite.—The division of lesions occurs according as the functions of nutrition or of relation may be deranged. In the first place we may have several of what we may term negative symptoms: the intelligence is usually intact, we do not observe delirium &c., if the inflammation occupy no other part than the spinal marrow; the patient is free from headache, giddiness, and other symptoms of cerebral irritation. We are, however, to except cases where the inflammation engages or may extend to the upper part of the chord; when the medulla oblongata becomes implicated in the disease, we may observe agitation, delirium, coma, and other phenomena, arising from the proximity of this part to the great centre of the nervous system. The derangements of mobility naturally occupy a principal part amongst the symptoms of myelitis; they are very various, and predominate over all the others. In some cases the faculty of motion is extensively compromised, and hence after death you will generally find that the inflammation occupies the anterior pillars of the spinal marrow. This pathological fact is perfectly in accordance with the physiological experiments of M. Magendie, who as you know has proved that the anterior columns chiefly preside over the motions of the body. The seat of those lesions of mobility will depend entirely upon the part of the spinal marrow that is inflamed. Hence they vary with the divisions we have just now established, as the cervical, dorsal, or lumbar portions of the chord become implicated. The faculty of motion, then, may be lost in the superior extremities; in the trunk and muscles of respiration; in the lower extremities. All these parts may be variously affected, and perhaps the only general principle we can lay down is, that the lesion of motility affects all parts of the muscular system which receive their nerves from below the inflamed point of the spinal chord. All these parts, I say, usually present various lesions of motility, such as convulsion, paralysis, contraction, &c.; there are, however, some exceptions to the general rule now laid down. Thus in the *Physiological Journal* of M. Magendie, you will find a very remarkable case related: the cervical portion of the spinal marrow presented a considerable degree of ramollissement in its anterior columns; the upper extremities were paralyzed, but the lower limbs preserved the faculty of motion intact. Here, then, the influence of the disease was not propagated downwards.

A second general principle to be deduced from the cases of myelite which we have observed ourselves, or which have been published by others, is, that when the inflammation commences in the lower portion of the chord, producing paralysis of the inferior half of the body, it has always a tendency to mount upwards: you will first observe a paralysis of the abdominal muscles; the chest next becomes affected; and, finally, the upper extremities lose their power of motion. This is a principle that you should remember, for it explains the trouble of respiration and other grave symptoms, that we often witness in the latter stages of myelitis.

We have now to inquire into the nature of those

Lesions of Motility

to which we have pointed, as the principal characteristic symptom in inflammation of the spinal chord. The muscular action may undergo various modifications, according to the seat and march of the disease, the lesions of motility being more or less marked according as the inflammation may take on an acute or a chronic form. In some patients we do not observe any true paralysis. The only modification of motility which they present is a certain weakness and loss of force in the extremities sometimes. Sometimes the paralysis attacks a single finger, then gains the rest in turn, and gradually ascends up the arm. Some patients complain of nothing but a feebleness when they would grasp any object, an incapability of executing their accustomed motions with energy. Others, again, are attacked with convulsive motions in some of the muscles. The paralysis may come on in a gradual manner, being preceded for months, even a year, by weakness in the limb; or, on the other hand, it may declare itself in a sudden and unexpected manner. This latter form is much more rare than the preceding, because chronic inflammation of the spinal marrow is a disease more frequently met with than acute myelitis. In some cases the existence of inflammation within the vertebral canal is betrayed merely by a

spasmodic contraction of some of the muscles; at other times the symptoms are more slight; the patient is perhaps tormented with what are called cramps, and this may be the principal phenomenon for a great length of time. There are patients in whom inflammation of the spinal marrow declares itself by an attack of convulsions, and then we chiefly remark them in the acute stage. Sometimes these convulsive motions assume the character of chorea, and can be distinguished with difficulty from it; of this an example was published lately by an interne of the *Hopital des Enfans Malades*. Finally, tetanic symptoms may join themselves to the long catalogue of lesions of motility we have now laid before you. The cause of tetanus has without doubt often escaped the researches of the anatomist; but inflammation of the spinal marrow may give rise certainly to tetanus, as it sometimes does to chorea; the symptoms are then terrible, and the sufferings of the patient only terminate by his death.

Thus you see how various are the lesions of motility connected with inflammation of the spinal marrow; and here we might ask ourselves the question so often suggested by a review of cerebral diseases. "How comes it that the same lesion produces such a diversity of phenomena?" We have explained to you how many of the disorders accompanying this affection consist in lesions of the intelligence, or of movement; and we saw, in particular, how the latter function undergoes a great variety of modifications. Inflammation of the spinal marrow may also evince itself by

Lesions of Sensibility (in the neighbourhood of the Spine),

existing either alone, or accompanied by some other of the symptoms we have already pointed out; they exist chiefly when the posterior pillars of the spinal marrow are implicated, and this confirms what we have said in the last lecture on the experiments of MAGENDIE, BELL, and other physiologists, on the different functions of different parts of the chord. These lesions of sensibility may exist in the immediate vicinity of the spinal marrow, or may present themselves at various points of the body more or less removed. In the first case, that is, where the derangement of sensibility occupies the spinal region itself, we may observe a pain situate immediately over that point of the vertebral canal which corresponds to the inflamed portion of the spinal marrow; or, on the other hand, should the myelite be general, compromising the whole length of the nervous pulp, we may find a sensation of tenderness, passing into acute pain, from the top of the cervical vertebræ down to the loins. Thus you see that the modification of sensibility shown by a greater or less tenderness of the skin covering the vertebral spines, may be partial or general; the first being much more frequent than the latter, because inflammation is more frequently confined to a small portion of the chord, than diffused extensively through its mass.

In some cases, the pain which thus accompanies myelite is increased by motion of the body; in others this is not the case; the movements are executed with freedom, and the only sign of lesion exists in a small portion of the canal, not discoverable unless pressure is exercised directly upon it. Sometimes the pain is singularly influenced by a change of position; there are patients to whom the horizontal posture is intolerable, and who cannot lie down without suffering a degree of pain which compels them constantly to observe an upright position.

Although the spinal marrow is deeply seated in the centre of a bony canal, and covered with a variety of parts, such as bone, ligament, muscular tissue, and skin, yet experience has established beyond all doubt, that during the existence of an acute or chronic myelite, pressure made upon the spinous processes of the vertebræ may give rise to a greater or less degree of pain; this is a fact which is proved by frequent observation, though we cannot exactly explain how pressure can influence the sensibility of a part so deeply seated, and protected in so complete a manner.

The most ordinary method employed for establishing the existence or absence of this symptom is to run the finger downwards along the bony ridge formed by the spinous processes. When you come to a sensible point, there is the seat of the disease, and its extent may be estimated according to the limits of the painful integument; another method sometimes recommended by authors, is to dip a sponge in very warm water, and then pass it along the line of the spinous processes; when you arrive over the inflamed portion, the patient will evince signs of pain and uneasiness. I have had recourse to this method more than once, and did not find that it succeeded; there was no symptom whatever of pain, although the patient evidently laboured under an inflammatory affection of the chord, or its membranes; I therefore think it should be abandoned for the former, which is much more sure and satisfactory.

But before we go any further, let me hasten to warn you that the existence of pain upon pressure over some one point of the integuments covering the spinous processes of the vertebral canal, is far from being a certain indication of myelite. We can never affirm the chord to be inflamed from this one symptom alone; the reason is evident. Reflect for a moment on the number and variety of parts submitted to pressure, when you run your finger along the spinal column in the manner just pointed out. An

affection of any one of these tissues may clearly give rise to painful sensations, and even the more readily as they are more superficial. Let us enumerate briefly these several parts. In the 1st place, commencing from within outwards, you have the fibrous tissue, and this you know is one frequently subject to rheumatic inflammations; hence the sensibility of the integuments may be nothing but a simple rheumatic pain. 2nd. Some one portion of the osseous canal may be diseased; the intervertebral cartilages may be ulcerated, the bodies of the vertebræ inflamed, the spinous processes themselves more or less extensively carious. In all these cases, pressure will necessarily produce more or less pain, without the nervous pulp being at all implicated in the malady. 3rdly. The symptom in question may depend upon a true neuralgia of the spinal marrow, a disease whose existence has been established upon authorities that we cannot contest; rachialgia then may produce tenderness along the dorsal region, though it differs essentially from inflammation; indeed, the pain by which it is accompanied is in general more severe and excruciating. Finally, the disease may be confined exclusively to the membranes of the chord, and the modification of sensibility which now occupies us, will, in that case, be connected with a lesion to which the substance of the chord itself may be a complete stranger.

Lesions of Sensibility in more distant parts.

So much for lesions of sensibility in the neighbourhood of the canal. In a second form we said the pains might occupy a distant portion of the body, the limbs, for example, the abdominal region, &c.; or may follow the trajects of the great nervous chord. This species of pain sometimes accompanies the disease through its whole course, and is constant; at other times it is intermitting, and does not affect the patient except at certain intervals. It plays a most important part in the history of myelite, and requires to be investigated with more than common attention. In more than one case these pains in the limbs have imposed upon the physician, simulating in the closest manner a rheumatic affection, or other pains, and withdrawing his mind from the real source of the disease, to search after another that has no existence. You will find several examples of this, as we may call it, false rheumatism, in authors, where certain painful affections of the limbs were for a long period of time the only remarkable symptom; and where their subsequent termination in a dangerous disease indicated, though too late, the origin from which they were derived.

In certain cases the development of inflammation in the substance of the spinal marrow is preceded for a very considerable length of time by acute pains in some of the limbs. This is a circumstance to which we cannot too strongly direct your attention. Remember then that the principal affection may commence by sympathetic derangement of the sensibility in a distant part of the body; that this lesion may exist for a long period without any apparent connection with the chord; and finally, that inflammation of the nervous pulp may reveal itself by no other symptom than pains, more or less acute, in some one of the four members.

Let us now turn to a contrary case, viz., one in which we have

Myelite accompanied by a Diminution of Sensibility,

not by a derangement, but by a diminution, or even a complete loss. In most examples that we meet with, the loss of sensibility is partial, commencing in a particular portion of the body, as for example, the fingers, and then gradually extending to the root of the body. But sometimes the whole surface is equally affected. We do not find any trace of sensibility on pinching the integuments all over the body. The lesion is here general; but observe a curious fact, one of those exceptional circumstances which present themselves so repeatedly in the study of nervous diseases, and which we are unable to explain upon any anatomical principle. Even when the loss of sensibility is, as we have said, general—when the whole body seems equally withdrawn from external impressions, you will sometimes find a few points of the integuments, perhaps a single line, in which the faculty of sensation still lingers, while all around is, as it were, dead. We have witnessed more than one case of this kind. It is a curious point in the history of myelitis; for how can we explain the fact that out of many parts supplied by the same nerves, receiving their nervous influence from the same portion of the spinal marrow, one remains perfectly insensible, while another, distant but a few inches, or even lines, conserves its power of perception intact. In a far greater number of cases, however, the lesion of sensibility is not so extensive; it may consist in a single engourdissement, or numbness of certain parts of the body; this is chiefly seen in cases of chronic myelite, when the patient experiences no modification of sensibility except in the upper extremities; the fingers, perhaps, are numbed; the patient has a tingling sensation in the extremities; sometimes the whole arm is cold, or he is unable to warm himself, and complains constantly of a sensation of chilliness.

Thus you see how inflammation of the spinal marrow is accompanied by numerous symptoms of derangement in sensibility and motility, varying from a complete loss of muscular power in one or more limbs, and a total annihilation of feeling, to a simple

weakness, or the slightest shade of modified sensation. You also saw, in our last lecture, how encephalitis gave rise to certain troubles of the function of nutrition. The same class of symptoms not unfrequently accompanies inflammation of the spinal marrow; let us now turn to these; and first as regards

Troubles observed in the Organs of Digestion.

A certain number of cases of myelite are characterized by a greater or less *difficulty of deglutition:* the patient is unable to swallow either liquid or solid aliment with facility, it is only after repeated and long-continued efforts that he can pass his food along the back of the mouth and pharynx. This phenomenon is more easily explained than many other derangements of the motile power which we observe during the course of a myelite: it certainly is connected with paralysis of one or more of the muscles composing the pharynx and upper part of the œsophagus; hence arises derangement in the function of deglutition; hence is produced a symptom to which we would call your attention. Or it may sometimes simulate other diseases, and give rise to a complete error in the diagnosis. Thus you may have a patient labouring under many of the symptoms of angina, such as uneasiness about the throat, difficulty of swallowing, &c.; these phenomena may persist for a considerable time, and resist all the ordinary means, because they depend, not upon an inflammation of the mucous membrane of the pharynx, but in a true, chronic inflammation of the spinal marrow. I had occasion to see a very remarkable case of this kind, some time ago, at the *Maison Royale de Santé;* it was that of a female, in whom, long before the appearance of paralysis in the limbs, or any alteration of sensibility, we observed great difficulty of deglutition, with paralysis of the tongue; these were for some time absolutely the only symptoms which she presented; the disease, however, at last assumed a more rapid march, and soon carried off the patient. On examining the body, we found the cause of the symptoms just alluded to, not in the brain, but in the spinal marrow. We found all the anatomical characters of acute inflammation at the superior part of the chord, viz. great injection, with softening, of the nervous substance. Here then was an explanation of the symptoms, for you all know that the nerves which go to the pharynx, and a portion of the lingual branches, are given off from this part of the spinal marrow, or at least from its immediate vicinity.

The fact which we have now cited is a curious one, and should put you on your guard against those partial lesions of motility which at first sight may seem insignificant, but sooner or later are followed by the most dangerous and fatal accidents. Mons. FOURNET communicated to me, a short time ago, a case exactly similar; there the cause of the injury was external, a considerable weight had fallen on the patient's back, and struck the upper part of the spinal column with some force; the individual was immediately seized with difficulty of deglutition, caused by paralysis of the muscles of the pharynx, and also, as in the former case, with paralysis of the tongue.

In some individuals we observe as derangement of the digestive functions, a set of symptoms which belong more peculiarly to encephalitis; we have *vomiting*, and this may even be the predominant symptom: in others, the small intestines are principally deranged; the patient is obstinately constipated, and we cannot obtain alvine evacuations, even by employing drastic purgatives. The difficulty of moving the bowels in tetanus is well known: does this depend on the spinal marrow being implicated in the disease?

If the Circulation be troubled,

then we may have general fever, with its ordinary phenomena; however, when the inflammation of the spinal marrow is not very extensive, the patient is usually free from fever; the skin remains cool, and the circulation is not accelerated beyond its normal standard. But the circulation becomes often deranged in a manner that cannot be attributed to febrile excitement. Mons. SERRES was the first who called our attention to this phenomenon, which is a very remarkable one. In some cases the patient is constantly tormented with more or less violent palpitations of the heart, and the trouble of this organ may even be carried to such a degree as to simulate closely aneurysm: we may, perhaps, explain this symptom by the direct action of the spinal marrow upon the heart, and the immediate communication between them; but however this may be, the fact is no less certain and worthy of attention. Some individuals, instead of palpitations, show a singular tendency to faint; I have an example of this now under treatment; it is that of a young lady who presents all the signs of inflammation of the spinal marrow; she is compelled to observe the most strict rest; whenever she moves, whenever the action of the spinal marrow in the production of voluntary movement is at all increased, the central organ of the circulation becomes immediately affected, and she falls into a state of weakness and fainting, from which nothing preserves her but an abstinence from all motion. Thus we have two species of derangement in the circulatory organs accompanying myelitis. One in the acute stage, the simple inflammatory fever, too well known to require any notice. The second species usually accompanies chronic inflammation of the chord, and declares itself either by palpitations and other irregular actions of the heart, or

by fainting and a momentary suspension of the circulation. Let us now examine

What influence is exercised on the Respiratory Organs in Myelite.

We cannot doubt but that inflammation of the spinal marrow modifies this function in a considerable manner, especially when the inflammation occupies that portion of the chord from which the intercostal nerves are derived. When the disease is situated lower down, the patient may remain free from symptoms of dyspnœa for a length of time: this we can readily conceive; however, in almost all cases when the malady has been prolonged to any considerable period, the respiration becomes embarrassed, and, in virtue of a law which we laid down in a previous part of the lecture, every myelite has a tendency to ascend from the lower portions of the spinal chord to the superior. In encephalitis, or inflammation of the brain, the pneumogastric nerve becomes implicated, and the respiratory functions are eventually deranged, from the trouble of innervation in the central organ of the nervous system. In myelitis, or inflammation of the spinal marrow, the circumstances are quite different. Here the influence is no longer cerebral, or nervous, but the immediate cause of dyspnœa resides in a diminution or loss of the mechanical powers which dilate the chest. The inflamed portion of the chord no longer stimulates the intercostal nerves; the muscles of the chest cease to act, and respiration is gradually extinguished. In some cases the diaphragm is chiefly affected. This important muscle is occasionally struck with paralysis, or ceases to act with its accustomed energy. In other cases the action of the muscles is inordinate. Finally, we sometimes have occasion to observe cases where the actions of the diaphragm instead of being performed with regularity, as in a state of health, become spasmodic, and the patient is distressed with a constant hiccup.

The definitive result of the various lesions of the respiratory organs which we have just enumerated, is to produce sooner or later a degree of asphyxia, under which the greater number of individuals who die from inflammation of the spinal marrow, succumb. The influence, then, of myelitis on the respiratory functions is well established, and sometimes the first signs may be discovered long before the disease has sufficiently advanced to modify the motions of the chest. I will relate to you a case which I saw this summer:—A young man had suffered for a length of time from a fixed pain in the upper part of the cervical vertebræ: this was accompanied by a bruit de cracquement, whenever the region of the neck was submitted to examination. During the continuance of this pain in the region of the spinal marrow, he was subject from time to time to attacks of dyspnœa, of the most violent character, with a horrid access of suffocation, which seemed imminently to threaten his existence: this lasted for a few minutes and then went off, to return again at an uncertain period. Upon examining this case with some attention, we thought the symptoms depended upon some disease situated in the articulation of the first cervical vertebra, giving rise from time to time to displacement and strong compression of the spinal marrow. You can understand that if the attacks of suffocation to which we now allude had continued during a long period, they might naturally enough have led one astray, and given rise to the idea of asthma: indeed, perhaps, we might not go too far, if we were to say, that certain species of this latter disease, which most authors regard as depending exclusively on an organic lesion of the heart or pulmonary tissues, might be traced to derangement in an organ far from either the respiratory or the circulating systems. It now remains for us to ask,

Are the Secretions modified in Myelite?

Yes, certainly, inflammation of the spinal marrow does modify them, though not in any remarkable degree. You will find it very generally asserted in authors, that the vessels secreting the perspiration cease to act when the limb is paralyzed; in a word, that such portions of the body as have lost the power of motion do not perspire. This may sometimes be the case, but it is far from being a general rule. I have seen many cases which prove the contrary. There is another fluid which is modified, but merely in the mode of its excretion. Several patients affected with inflammation of the spinal marrow, cannot urinate well; however, observe that this does not depend upon any diminution or change in the secretion itself; the incapacity of urinating is here one of the phenomena of paralysis, and the secretion is retained because the bladder is unable to expel its contents. Having thus briefly noticed the modifications of secretion, we come to a question of great interest, and one which has given rise to considerable controversy, viz.,

How far are the Reproductive Organs influenced by the existence of Myelite?

Here the facts upon which we can depend are very few: however, I may tell you, that I have seen a patient affected with acute pain along the dorsal region, with pains in the limbs, convulsive movements, and other similar signs of myelite, in whom there existed at the same time a very considerable excitement of the genital organs, such as priapism, &c., and this confirms the experiments of certain physiologists, on the connection between the posterior pillars of the spinal marrow and the cerebellum, with the reproductive propensity and its organs. In

chronic myelitis an exactly opposite state has been observed, and the prolonged inflammation of the chord has here been known to bring on complete impotency. The facts to which we have just now alluded, and several others that we possess, are not to be neglected because they are not, perhaps, as complete as we could have desired: if we cannot derive from them any rigorous conclusions, they seem at all events to indicate that the spinal marrow is not altogether foreign to the normal accomplishment of copulation. In the female sex we also observe a certain number of facts that are worthy of attention. Thus authors relate that acute inflammation of the spinal marrow in pregnant women is accompanied by abortion. The nervous irritation gives rise to premature contraction of the uterus, which expels its contents before the period of maturity has arrived. In another form of myelite, where there there is little reaction, but a greater tendency to collapse, the uterus partakes in the general impression, is struck with inertia, and the accoucheur having in vain tried to stimulate it to contraction, is forced to have recourse to artificial means of delivery. However, these phenomena are far from being frequent or general. The premature expulsion of the fœtus is by no means a necessary consequence of myelite, and you will see many women who present the symptoms of myelitis in a well-marked manner, continuing to bear the fruit of conception without any derangement whatever in the organs of gestation.

The Diagnosis of Myelite.

From the observations which we have now laid before you, you may perceive what a variety of symptoms accompany the development and march of inflammation of the spinal marrow, according to the nature, seat, intensity, and duration of the malady. Let us then pass to the diagnosis of myelite.

On reflecting upon the numerous lesions of sensation and motion which successively present themselves during inflammation of the spinal marrow, you might think it an easy matter to form a correct diagnosis of the disease, and distinguish it from all other organic affections, but this is not the case. It is by no means easy to determine, in all cases, that the inflammation is situate in the marrow alone, or to discriminate its accompanying symptoms from certain analogous phenomena that occur in the course of other maladies. There are several circumstances which may lead you into error; let us hasten to point out the leading ones. In the first place, the osseous tissue composing the bodies of the vertebræ may be the part diseased, and yet it may be impossible to appreciate the lesion externally. Here, then, it will require the greatest attention, and no small degree of medical skill, to determine whether the early symptoms depend on a true inflammation of the nervous pulp of the chord, or on a similar affection seated in the bony canal surrounding it.

There are cases where the phenomena of inflammation of the spinal chord are belied, if we may use the term, by other maladies of a different nature, where the functions of this part of the nervous system are notably deranged, without any trace of organic change existing after death. This is a fact upon which you may rely with certainty. I have seen many examples of it myself, and therefore speak with more confidence than if my assertions were founded upon the testimony of others. I have witnessed many cases in which paraplegia had existed for a considerable period of time, yet I was unable to discover any trace of organic lesion in the spinal marrow, although I examined the nervous substance, the membranes of the chord, and the bones which compose the canal, with the most scrupulous attention. It may seem strange that so grave a lesion of motility as paraplegia should exist for a length of time without leaving behind it any change of structure in the organ which regulates voluntary movement; but such, I repeat, is often the case. The same thing is seen in the brain. As we advance with the present course you will have occasion to see many other examples, and to convince yourselves that in nervous diseases the true cause of the functional disorder but too often escapes the researches of the most experienced anatomist. On the other hand, we have grave and extensive lesions of the brain, which declare themselves by no symptom whatever. We have cited cases of ramollissement, of suppuration, occupying a considerable portion of the nervous substance, and yet the phenomena of sensation and motion were absolutely unaffected. These cases deserve to be compared and contrasted with the former; they show the immense difficulties that surround us in every step we take in the study of nervous disorders, and point out the necessity of observing with minute care the most trivial points, in the hope of one day arriving at the solution of questions which at present are beyond our comprehension.

In numerous cases of myelite the symptoms are so equivocal, so slightly marked, as to escape our notice altogether. In many other cases we have phenomena, which, however grave, we cannot attribute to any permanent organic change of structure. Thus we have seen an hysterical female who remained paraplegic for several days, and then suddenly recovered the use of her lower extremities. In other cases the patient becomes blind, or has an obstinate contraction of one or more limbs, and yet these symptoms will disappear more suddenly than they were produced. Again, look at the paralysis that sometimes accompanies

poisoning by lead, or what is called "colica pictonum." Here certainly we have no injury of the spinal marrow. In these, and many other cases, the lesion, whatever it may be, escapes discovery; it is in vain that you will seek to explain the functional derangement by an organic change. Unfortunate is he who obstinately persists in such a path. Truths that are familiar to others will escape his notice, or be rejected without examination; the search after a chimera will distract him from more solid pursuits; he will remain for ever at the portal of science; he may knock, but will never enter.

Dr. ESQUIROL relates a case in which the lower extremities were completely paralyzed during life, and what do you think he found on examination of the body? He found two cancerous masses occupying each anterior extremity of the cerebral hemisphere. Here, certainly, according to the received ideas, the lesion should have occupied some portion of the spinal marrow. This is a remarkable case; we find the brain usurping, as it were, the functions of the chord, and giving rise to a lesion of movement which is especially connected with diseases of this latter organ.

Another observation, equally worthy of attention, was published a short time ago in the bulletins of the *Anatomical Society*. Here the patient also suffered from paraplegia; the lower extremities were paralytic. On examination after death, the seat of the disease was naturally sought for in the spinal marrow; but the nervous substance was every where perfectly healthy. It was observed, in opening the body of the patient, that the bones were remarkably friable, and this led to further researches, which revealed the true seat of the disorder. The heads of both thigh-bones were completely destroyed, and hence the pseudo-paralysis, as we must call it, depended not upon a want of nervous influence, but on the simple circumstance that the limb was incapable of being moved, because the upper part would not stir. We merely notice this case to show, how necessary it is in medicine to observe everything with the strictest accuracy; for although pathological anatomy may not give the key to all the functional derangements that present themselves in the course of disease, yet we should never neglect to pursue it with ardour, and scrupulously examine every circumstance that may tend to throw light on their nature and causes.

Simulations of Myelite.

In speaking of the diagnosis of myelite, we mentioned that certain affections simulate in a very close manner diseases of the spinal chord: it is only within the last few years that this part of the subject has been studied in a regular manner, particularly in England and Germany, where Messrs. GRIFFIN, TEALE, STIEBEL, HINTERBERGER, and ENS, have sought to generalize the facts which they have observed, and reduce them to certain principles. Let us enter into some details upon the subject, which is not without interest, especially as you will not find it touched upon in any of the works in your hands; indeed the subject is one new to myself, and I am indebted for my information to the analysis of the works of Messrs. GRIFFIN and ENS, published by the *Gazette Medicale*. If you wish to refer to these, you will find the analysis of Mr. GRIFFIN'S work in No. 18 of the journal for 1835. The notice of Mr. ENS'S was published a very short time ago in No. 46 of the same journal.* The gentlemen whose names we have just quoted, describe an

"Irritation" of the Spinal Marrow,

whose principal characteristic is to produce a symptomatic irritation in some other part or organ of the body. It is not inflammation, but a disease *sui generis*; in a word, what we call "irritation;" and leaves no trace of organic change after death. Let us see how they establish the existence of this malady. Suppose the patient is affected with palpitations of the heart, weight and constriction about the pericardial region; a feeling of suffocation, frequent nausea, fainting, &c.; they exercise pressure along the spine, and when they come to that portion of it which corresponds to the irritated part of the spinal marrow, they pretend that all the symptoms are aggravated by the pressure. When the stomach is the organ chiefly affected, pressure over the spine increases the nausea, the vomiting, the pyrosis, the pain in the hypochondriac region, and other signs of gastric irritation. If it be the head, the cephalalgia and nervous pains are considerably augmented. Whenever phenomena of this kind are witnessed, that is to say, whenever (according to Dr. ENS) "a sensibility of a greater or less portion of the spinal marrow to external pressure, coincides with a corresponding pain in some other organ, which we can augment at will by that pressure, the disease consists in an irritation of the spinal marrow, whose seat is indicated by the tenderness of the rachis." According to Mr. GRIFFIN, it is not necessary that any tenderness should exist over the region of the spine. If pressure excite pain in the distant organ, the point of the spine at which this phenomenon commences, is the part affected, although it may not itself be the seat of any lesion of sensibility.

All this may be very true, but it remains to be verified by further observation. I must confess that to me the idea of pres-

* Dr. ENS'S paper is contained in No. 2, Vol. 11, of *Frorl's Magazin* for 1835.—ED. L.

sure upon a single point of the spine increasing, at will, palpitations, vomiting, headache, or other disorders in a distant part of the body, especially when the spinal marrow does not exhibit any symptom of disease,— all this, I say, appears to me to partake a little of romance. However, we must examine the subject more carefully before we can judge. In medicine, facts are not to be rejected because they may seem a little extraordinary.

The observations of the same physicians tend to establish that a great number of neuralgic affections, attributed commonly to the fifth pair of nerves, really depend on the irritation of the spinal marrow now alluded to. This they establish in the way just alluded to. The patient has, perhaps, a pain in the superorbital region, in the jaw, &c.; pressure over the upper part of the cervical vertebræ invariably augments this pain, if connected with spinal irritation; hence the true seat of the disease is to be sought in the spinal marrow, and not in the branches of the nerve, as we have been accustomed to think. In the chest, this affection may give rise to symptoms which simulate phthisis. A cough more or less obstinate is the most common symptom of irritation of the cervical portion of the spinal marrow. The respiration is often embarrassed; in some cases the patient has accesses of suffocation, always increased by pressure on the superior nerves. Many observations also show that several pains existing about the parietes of the chest, and mistaken for rheumatism, depend on this same "spinal irritation" of which we speak. This latter phenomenon is much more probable, and is consistent with what we know of the effects of chronic myelitis. A disease of common occurrence in practice, one that you will frequently meet in certain females, is neuralgia of the mammæ; this affection they attribute in a great many cases to irritation of the spinal marrow, and we can admit it ourselves amongst the causes.

Again, Messrs. Griffin and Ens speak of a peculiar pain in the region of the sternum, which is always aggravated by pressure over the spinous processes. Three days ago I had occasion to see a case that one would have been inclined to arrange under this class. A gentleman called upon me at my house for advice; the only symptoms he presented were, a well-marked sense of tenderness in the skin covering the sternum, together with an habitual dyspnœa. I examined the pulmonary and circulating organs with care, and could discover no trace of disease. My head was just then full of the doctrines of Mr. Griffin, and the idea of spinal irritation could not, of course, escape me; I therefore passed my fingers along the cervical vertebræ, pressing upon each to see if the local pain might be modified, but nothing of the kind occurred; however, the case I now mention is merely a negative fact, and proves nothing against the facts established by Messrs. Ens and Griffin. In the abdomen this irritation may simulate several maladies, such as vomiting, colic, various diseases of the uterus, &c.; but as we said before, all this remains completely to be verified before we can admit it into the science: moreover, it is only an extension of the facts which we have noticed when speaking of myelite and its symptoms. But it is probable that some forms of asthma may depend upon inflammation of the spinal marrow; yet there is still a vast distance between the two ideas. So much for the doctrine of "spinal irritation." Let us now resume the

History of Myelite.

The *duration* of this disease is very variable; sometimes it may terminate in a few days; at other times it is prolonged for a considerable period, and may last for eight or ten years. It may *terminate* in a cure; but whenever inflammation of the spinal marrow is well marked, the disease is grave, and the prognosis unfavourable. In cases where death results, this latter termination may arrive in a different way: 1st. By extension of the inflammation upwards towards the brain: we have already noticed the tendency of myelite to propagate itself upwards. 2nd. By extending to the respiratory organs, when the patient dies asphyxiated. 3rd. By implicating the heart; and 4th. Where none of these three organs is affected; the patient sinks gradually; he wastes away; the exposed parts of the body submitted to pressure ulcerate, and he dies in a state of complete exhaustion. A certain number of patients affected with acute inflammation of the spinal marrow go off in this way, without any of the great functions having been implicated during the course of of the disease.

Treatment of Myelite.

Upon this point we shall be very brief. The principles are exactly the same as for encephalitis. When accompanied by symptoms of reaction, you must take blood from the arm: if the fever be mild, you may content yourselves with an application of leeches or cupping-glasses along the spine, repeated according to circumstances. In cases of chronic myelite, a good deal of reliance may be placed on cutaneous revulsives, particularly on moxæ, or the cautery. Some physicians prefer applying douches before they act on the skin; while others direct their attention chiefly to the intestinal canal, and give purgatives, or laxative remedies, according to the patient's habit, or the object they may have in view.

ST. THOMAS'S HOSPITAL.

CLINICAL LECTURE

ON CASES OF

DISEASES OF THE JOINTS.

Delivered in the Session 1835-6.

BY MR. TYRRELL.

LECTURE I.—DISEASES OF THE HIP-JOINT.

GENTLEMEN,—I intend to-day to address to you some observations on diseases of the joints. I have under my care at present many of those cases, and as the histories of several of them have been collected, I shall briefly relate the particulars, subsequently commenting on them, in order that you may trace the progress of diseases affecting the articulations so far as you are thus afforded the opportunity of doing so. Perhaps no subject in surgery is more important. They are productive of extreme distress to those who are the subjects of them, and the surgeon cannot be too careful in investigating them, and in distinguishing the means of cure. To four cases, in particular, I shall now direct your attention.

Case 1.—The first case is that of a patient with disease of the hip-joint. The hip is as frequently affected as any other joint, and perhaps its diseases are of more importance than the affections of any other joint. There is a man in Abraham's Ward, named Edward Carpenter, aged 26, from Bermondsey, who was admitted on the 8th of October, under my care. He stated that he had been regular in his habits, and that ten days previous to his admission, while lifting a sack of seed weighing about three hundred pounds, he experienced a sudden and severe pain in the left hip, extending to the loins, which obliged him to discontinue his work. On the following day, the pain still continuing, he obtained relief to some extent from cupping upon the buttock, according to the directions of a medical man to whom he applied. Pain in a short time was felt also in the knee, extending down the inner side of the leg, as far as the malleolus internus. Blisters were applied at this time, but without much benefit.

On admission he had a dull aching pain, principally situated at the anterior and inner part of the knee; and this pain was more particularly aggravated towards the evenings. Pressure on the groin produced severe pain. The left buttock was somewhat flattened. Pressure over the posterior part of the hip produced only trifling pain. Upon further investigation this limb appeared to be rather longer than the other: this seemed to arise chiefly from the obliquity of the pelvis. There was a slight wasting of the limb. Every movement of the thigh produced some degree of pain. The pain of the knee was not increased by flexion or extension of the leg. The sleep was disturbed by the pain at night. His general health was pretty good.

I directed an occasional aperient to be given, of senna and salts, and ordered a moxa, of about the size of a shilling, to be applied to the left groin, about an inch to the outer side of the femoral vessels. I further ordered that he should have a grain of the acetate of morphia, with a view to allay the pain and to procure rest, and that he should keep his bed.

13. The report to-day was, that he had rested better at nights, and the pain of the knee somewhat diminished. The slough of the moxa, though partly, had not entirely, separated.—Next week the account was that he complained of pain on the inner side of the knee, extending down to the ankle. Pressure did not produce so much pain. The discharge from the moxa was trifling. I found at this time that he had been used to a certain quantity of stimulus, and as his general powers were failing, I directed that he should have a pint of porter daily, in addition to the medicine which had been ordered.

27. The moxa is discharging freely, and the pain is greatly relieved. He can move the limb without difficulty. The limb appears now to be of the same length as the other; sleeps well at night; the appetite and general secretions are good; bowels open.

30. He is not quite so well. The pain in the knee has become more severe. He has had but little rest at night, and the moxa has ceased to discharge. Probably that, and a change taking place in the weather just at this time, would account for the aggravation of symptoms.

November 3. Pain in the knee severe, particularly on the inner side. Pain in the hip, upon pressure on the anterior part, but not much when pressed posteriorly. I directed another moxa to be applied, in consequence of the aggravation of the symptoms, to be placed a little lower than, and anterior to, the first, which was a little more distant from the joint than I could have wished.

11. Up to this period he has been progressively recovering. The pain in the knee is but trifling, and pressure on the hip produces no pain. There is slight numbness down the inner side of the leg, but only very trifling symptoms remain to indicate any mischief in the joint.

Case 2.—Septimus Carter, a bricklayer, aged 19, residing at Kennington, of rather intemperate habits, was admitted likewise on the 8th of October last. He said, that

about five months ago, whilst at work, he experienced a rather severe pain in the right knee, which obliged him to discontinue his labour for a time. His pain was relieved by rest, so as to enable him to resume his work; but he had not entirely got rid of it. In the course of the second day after he had returned to his work, the pain came on more severely in the knee, and he then applied for medical aid, and had blisters placed on the knee, but without any beneficial effect. On his admission, he complained of an aching pain on the anterior and inner part of the knee. I examined the hip-joint, and found that pressure on the groin produced pain; sudden abduction of the limb also produced pain. There was no appearance of the limb being longer than the other, but there was a little flattening of the buttock. As his tongue was not clean and his rest was disturbed, I gave him a small quantity of calomel with half a grain of opium; and the symptoms being trifling; I ordered an emplastrum lyttæ to be placed on the groin.

14. The pain in the knee is somewhat relieved; he rests well at night; complains of headache. He was now ordered to repeat the blister, as the former had closed. I had only directed that it should be dressed with simple ointment, or a poultice. A week afterwards he had no pain, except on pressure being made over the anterior part of the hip-joint. But six days afterwards there was a relapse, and he complained of pain in the knee, particularly on the outer side of that joint. Pressure over the anterior surface of the hip-joint gave rise to pain. Any movement of the hip whatever, was attended with uneasiness. I now directed a moxa to be applied to the groin. At this time there was no indication of any disturbance of the general health. Still I have no doubt that that disturbance of the general health had commenced which was afterwards observed.

Nov. 3. Pressure increases the pain. He says he has a general numbness of the foot. It is now quite clear that he is labouring under the full effect of febrile irritation, having, as he states, caught cold.

4. He has still more general symptoms of fever; severe pain in the head; skin hot, tongue furred, bowels open, pulse quicker than usual, and he has a cough. He was now directed merely to take a little effervescing mixture.

5. Passed a bad night, and complains of great soreness about the epigastrium. He now took a dose of rhubarb and calomel, and was likewise ordered to take the house medicine if the former did not act. A blister was also ordered to be applied to the epigastrium.

6. He took a dose of the house medicine; the cough has been distressing; he has had but little rest; the soreness of the epigastrium continues, but the skin is moist; pulse a little softer, and the tongue getting clean. In consequence of the cough and pain, I directed him to have some of the Dover's Powder, and to take a drachm of the spiritus ætheris nitrici, a drachm of the sirup of poppies, and ten drachms of the camphor mixture,—a medicine calculated to act in some degree as a diuretic, and also to keep the secretions of the skin and bowels a little excited. Next morning it was found that he had passed a better night, but he still complained of pain in the knee, which was increased upon any motion of the hip. Pressure over the anterior and inner part occasioned more pain. Twenty minims of Ipecacuanha Wine were now directed to be added to each dose of the medicine.

29. The rest is much disturbed by the pain in the knee, and the cough is very distressing. Yesterday there was a good deal of pain in the left hypogastric region. There is pain in the epigastrium. The breathing is rather hurried; pulse 84, and very compressible; skin cool, and bowels open. I directed that he should take a small quantity of mercurial medicine, and that there should be a blister applied over the left hypochondrium. This is the case as it presents itself at present; the local affection is aggravated, and the case is a good one as illustrative of points which I shall presently note.

Case 3.—The third case is one of chronic inflammation of the fibrous capsule of the hip-joint; it is the case of Thomas Lachey, aged 11, residing in the city, admitted October 7th, into Abraham's Ward. He states that about four months ago he experienced a sudden pain in the left knee, but from no particular cause of which he was aware, and that it always increased towards evening, and after taking exercise. For this he was admitted into *St. Bartholomew's Hospital*, when he had two issues placed upon the hip, just over the trochanter major. Those issues having relieved the pain, he was discharged as cured. In a short time, however, the pain returned with increased violence, and in about a week afterwards he was admitted into this hospital complaining of pain of the anterior part of the hip upon pressure over the trochanter major. Any motion of the joint increased the pain. His rest at night was disturbed, but his general health was pretty good. From the severity of the disease and its duration, I directed the moxa to be employed; and from the feebleness of the general powers, which were rather below par, I ordered that he should have some porter in addition to the ordinary diet of the house. The affected limb was longer than the other.

13. Very much relieved. The affected

limb is still a little longer than the opposite limb. Pressure produces slight pain.

21. The lengthening of the limb is but trifling; the pain has subsided, and he is much better.

29. I found he could walk without pain; there was now no lengthening of the limb; the left buttock had nearly regained its natural size, and he was on this day presented as cured.

Case 4.—The next case is one also of chronic inflammation of the fibrous capsule of the hip-joint. Sophia North, aged 26, a housemaid, living at Farnham, in Surrey, was admitted into Queen's Ward on September the 3rd. She states that about four months ago she received a blow on the left hip, from a fall. The part in a short time became swollen, and she experienced considerable pain in the joint, and also at the anterior and inner side of the knee. The pain was of a dull character, and disturbed her rest. Leeches and blisters were applied, and the blisters were kept open, but she derived no advantage from them. Upon her admission she complained of pain of the anterior and inner part of the knee. The pain in the hip was more severe than it had been, and was increased by pressure over the trochanter major. Her general health was much deranged. I ordered that a moxa should be applied over the trochanter major, which gave but little relief. I then directed that a second moxa should be applied to the groin, which relieved her considerably.

Oct. 4. There is less pain; she sleeps better at night; perspires towards morning; the left limb is nearly an inch longer than the right; the buttock on the affected side is flattened, and the general health is impaired.

13. Much improved. To take the decoction of sarsaparilla twice a day.

20. Little alteration.

24. Pain a little greater; passed rather a bad night; the limb apparently is somewhat smaller than it was upon her admission.

28. Pain rather severe, but it does not disturb her rest; there is evidence of additional weakness, from copious perspirations; the discharge from the moxa has ceased.

Nov. 5. Rests tolerably well at night, and the moxa is nearly healed.

11. Pain in the knee yesterday, and increased by the slightest motion of the hip-joint. No pain in the knee to-day. Can bear pressure better on the posterior part of the hip, but when pressure is applied anteriorly, it produces some pain. I ordered that a second moxa should be applied.

Diagnosis, Pathology, and Treatment.—These cases all have reference to diseases of the same articulation, and three of them present very nearly the same symptoms. In the first case we find that inflammation was produced in the hip-joint by a violent strain. We can account for this, when we know that the muscles of the hip are attached to the fibrous capsule of the joint, their tendons being connected with the capsule itself; so that by violent exercise, such as raising a heavy weight, there might be laceration of the tendons of those muscles, and of the fibrous capsule itself—a very probable cause of such inflammation. We find the pain extending to the loins, probably from some slight strain of those parts, and not as being connected with injury to the hip. After inflammatory action had been set up, and simple means had failed to relieve the patient, he applied here, and we find that he had pain at the anterior and inner part of the knee. This pain is increased towards evening, and pressure produces an aggravation of it. Now, as to the situation of the pain, that is a point of importance. The fibrous capsule of the hip-joint is very extensive, but not so extensive as the mucous or the serous membranes. We know that in inflammation of the peritoneum, the pericardium, the pericranium, and so forth, inflammation extends very quickly along them. But if you take the capsular ligament of the joints, you will often find organic thickening taking place at one part of the ligament, while the other parts remain unaffected; and the pain of the anterior part of the joint denotes that the morbid affection is confined to that particular part. This is indicated by the sympathetic pain which affects the knee; and it is upon the anterior and inner part of the knee that the patient feels the pain. You can account for that by recollecting the anatomical structure, and the distribution of nerves to those parts,—the division of the anterior crural nerve, and the saphenus major and minor, one of which is continued to the foot, and the other is lost above the knee, on the inner and anterior side. It is of much importance to attend to this, because the closer in contact with the affected part that the remedies can be applied, the more likely are they to be of service. Frequently you will find that there has been an indiscriminate use of applications, or abstraction of blood, over the posterior part of the hip-joint. You generally find that blisters or moxæ are applied there, which are not likely to do one-sixth of the degree of good that they will do if applied to the groin, near the seat of the disease. It becomes, therefore, of much importance to ascertain accurately the symptoms, and whence they proceed.

Next, there is flattening of the affected buttock. This is the case in all the patients. Taking a posterior view of the affected and the sound parts, from the loins to below the knees, you would see the flattening of the buttock on the affected side, the marked division between the buttock and the thigh being lost. You would also observe the obliquity of the pelvis, which accounts for

the lengthening of the affected limb, the crista of the ilium on the sound side being an inch and a half higher than that of the affected side. As soon as the capsular ligament becomes affected, we have sympathetic affection of the knee, and sometimes sympathetic affection of the muscles at a great distance from the part which is the immediate seat of disease. The muscles of the leg become affected, so that its power is much diminished. The condition of the glutei muscles gives rise to this flattening of the buttock, when the patient is in an erect position, occasioned by the want of contraction that results from the adhesion of the integuments over the affected part. It is, therefore, from the loss of the natural power of the muscles to contract, that you have that appearance. On the sound side the proper muscular contraction takes place The affected limb is frequently said to be longer than the other; but the fact is, that a person who is the subject of an affection of the hip is always endeavouring to relieve the affected side, and for that purpose he is continually throwing the weight of his body obliquely upon the sound side. The one crista ilei may be thrown an inch or an inch and a half higher than the other; and even if you put the patient into bed, in the recumbent position, you will still find a slight degree of difference in the length of the two limbs.

But there is another very important point to be noticed, which gives rise to the apparent lengthening of the affected limb, even when the patient is recumbent; and that is from the formation of the hip-joint. The capsular ligament of the joint, which comes from the acetabulum, embraces, as you are aware, the head and neck of the thigh-bone, and owing to its construction this joint admits of motion in every direction,—abduction, adduction, flexion, extension, and I may say, every intermediate motion. We know that the capsule is longer than is absolutely necessary to retain the articular surfaces of the one bone in contact with the other; so that if you were to strip off the whole of the materials from the capsular ligament, you would find that you could draw the head of the femur from the acetabulum, to the extent of about an inch, or an inch and a half. The head of the femur, then, is kept against the acetabulum, in the healthy state, by the influence of the surrounding muscles. All the muscles which pass over the hip-joint have a greater or less influence of this kind, but more especially those which are immediately connected with the joint. Accordingly we find, that if, with forcible means, we pull the two legs, the healthy femur is still kept against the acetabulum, by the tension and influence of the muscles; whereas the separation of the affected bone from the acetabulum, is allowed by the difference in the condition of the muscles; and that may, as I have said, admit of a difference in the length of the limbs, to the extent of an inch or more. This is a point referable also to an injury. A patient may have a fall; he may fall heavily upon the trochanter major, and be conveyed immediately to a surgeon, who examines the condition of the limb. The patient is placed in bed, and the surgeon, amongst other modes of examination, tries the length of the two limbs. He is surprised to find a difference of an inch or more in the length of the two; but then he finds that there is free motion of the joint of the affected limb, and not a great deal of uneasiness created by the movements. Now if he was not aware of what I have just mentioned, he might pursue his inquiries to satisfy himself whether there was not really a dislocation; but recollecting what I have stated, he is aware that this occurs from the result of the injury,—that the muscles lose their contracting power for a time, and, as a consequence, allow of the separation of the head of the femur from the acetabulum, upon the application of very slight force.

We have thus an explanation of the pain of the knee, of the flattening of the buttock, and of the apparent lengthening of the limb. We may also explain the diminished size of the affected limb. In the case of such an injury as I have alluded to, we know very well that the larger muscles, those which move the leg, lose their power, and when that is the case, there will be an apparent difference in the circumference of the two limbs, because all muscular fibres in a healthy condition have constantly a tendency to contract. Expose a muscle, or cut it through, as in amputation, and you will immediately observe that there is a strong disposition in the fibres to contract. By sympathetic influence, therefore, the muscles of an injured limb become flaccid, and lose their tendency to contract, therefore the diameter of such muscles will be different from that of sound muscles. There may be the same extent of muscle, but still, if you measure them, you will find that there is a difference in the diameters. However, after a time, or from disease, the muscles actually diminish in size; there is a diminution of the muscular fibres. This becomes very apparent in a case where the disease goes on to ulceration, or even to a more extended stage of disease.

We have seen in each of these cases, that the pain is increased in the knee on motion of the hip-joint, and not increased at all on motion of the knee-joint. These are important points for you to keep in mind. Again, you find, in the second case, that the patient described himself as having experienced an injury of the knee, and he spoke of the plan of treatment that was employed, as having been directed to the knee alone,—blisters and leeches,—but they did not afford relief. Now a surgeon should, in

such a case, immediately direct his attention to the hip-joint, where he would find the true source of the disease. But the point is easily settled in this way. If it be a pain in the knee, and resulting from disease in that joint, it will necessarily be increased by motion of that particular part of the limb. If, therefore, we find, upon putting the finger over the ligaments of the knee, or on pressing the synovial membrane, that the pain is not increased; or, again, if we flex or extend the leg, which may easily be done without moving the hip-joint, we discover that the motion does not increase the pain, then we must immediately look to the hip, knowing that sympathetic pain of the knee is almost the only symptom which indicates incipient disease of the hip-joint. So it was in the case I now allude to. Examination of the knee did not enable me to detect disease of the knee; I therefore proceeded to an examination of the hip, and a superficial examination of that joint enabled me at once to ascertain the disease was there. Again, the situation of the pain affecting the knee is not that which is the result of disease of the knee-joint itself. The pain which has been observed in most of these cases, has been of the anterior and inner part of the articulation; and we find that that denotes the situation of the disease to be of the capsule of the hip-joint, for each patient complained of pain in the knee when pressure was made about an inch to the outer side of the femoral artery, over the situation of the capsule; but on all parts posterior to the trochanter major and tuberosity of the ischium, when pressure is made, you find they suffer but little. When the pain in the knee results from disease of the knee itself, you will detect that cause by pressure upon the knee, or motion of the knee-joint, as it will then arise from fibrous disease, or disease of the synovial membrane; you will appreciate this more distinctly from what I have to say by-and-by.

The pain in these cases being aggravated at night, is indicative of disease affecting the fibrous tissue. You see this very clearly in inflammation of the sclerotic coat of the eye. You can detect inflammation of this texture very readily, seeing that the surrounding structures are free from inflammatory action, it being alone the seat of disease: and when thus singly affected, we have symptoms, such as I have mentioned, indicative of inflammation of the fibrous capsule of the joint. The same is observable in inflammation of the pericardium, and the same in inflammation of all the fibrous tissues. The patient is perhaps well in the day, but towards morning or evening the pain is greatly aggravated. It is a kind of intermitting pain, of a dull, aching, but not lancinating or lacerating character; quite sufficient, however, to disturb the rest, and to produce exhaustion in that way. Such, then, is the *rationale* of the different symptoms so far as we have tried to illustrate the form of the disease from the descriptions I have given; that is to say, the symptoms I have been relating, point out the situation of the disease and the particular texture affected.

Now as regards the treatment adopted in these instances. We may know, from the observation of circumstances which I shall relate in connection with other cases, that the disease has not extended to the synovial membranes, nor to the cartilages; that it has not extended so as to produce ulceration or disorganization of those parts, but consists simply of slow inflammation of the fibrous tissues, therefore the remedies to be employed are not of a severe kind, constitutionally, nor very much so locally. In the first place we ought to ascertain whether the disease is connected with, or dependent upon, any peculiar condition of the system. We find in most of the cases before us, that the general health is good; there is only one case out of the four related, in which the state of the general system influenced the disease. In two of the others the patients became a little exhausted, perhaps from confinement to bed, and the discharges from the moxæ. I was induced from this circumstance to give them a quantity of such stimuli as they had been used to. But as to the local applications, or management, the first, and perhaps, the most important object is, that the patients should be kept at rest. They will find out the position which is most comfortable for themselves. Usually their comfort is increased by having some support under the ham; a small pillow, for instance, between the ham and the bed, and keeping the limb flexed. They will themselves move the pillow as they move the position of the limb. It is not necessary to confine or restrain the motions of the joint entirely. Merely moving the limb in bed may be sufficient for the comfort of the patient, and not likely injuriously to influence the disease. We find that the best mode of relieving the inflammation of the fibrous tissue, which is generally a subacute disease, is by resorting to counter-irritation; and we know that counter-irritation to a distant part from that which is affected, and to which you can make no immediate application, is often productive of good. For instance, we find blistering the head or neck in diseases of the brain, productive of beneficial results. So in pneumonia, or inflammation of the pleura, we find blistering the chest do good. Again; blistering the abdomen in peritonitis, or even in enteritis, is advantageous. So that applying counter-irritation to distant parts has a good effect as regards the diminution of the disease, wherever it is; but it is always better, wherever you can, to employ the counter-irritant as near to the seat of disease as possible. Thus, I should say, in

cases of inflammation of the brain, or of the membranes of the brain, a blister applied to the surface of the head is infinitely more effectual than one applied to the nape of the neck. Again, if we apply a blister to the anterior part of the chest, where the parietes are thin, we effect more good than by applying it posteriorly, where the parts are very thick.

I have directed your attention to the situation of the pain in these cases. If the pain be in the anterior part of the knee, you will find the disease to be at the anterior part of the capsule of the hip joint. If it be in the ham, the patient will experience more pain behind the trochanter; and in such a case, instead of employing the moxæ, as we have done in all these cases, in the groin, I should apply them on the posterior part, between the trochanter and the tuberosity of the ischium, over the posterior surface of the capsule of the hip.

When the symptoms are very slight, I have often found a blister on the surface produce all the effects to be wished for, combined with attention to the secretions, and rest. If the disease, however, has been of longer duration, and you have reason to suppose it has proceeded to some extent in the fibrous tissue, it is better to resort to the more severe remedy of the moxa. The moxa is the description of counter-irritation which we now usually employ, and a very good mode of exciting counter-irritation it is. I have known patients who have had the moxa applied, and have had issues formed by nitric acid and by potassa fusa, who have given the preference to the moxa, though one might be disposed in the first instance to say that they would rather object to the moxa, and be content with the other. Still, any of these will have the same beneficial effect.

It is not my practice here, and this is the result of experience, to keep the moxa open by the use of any extraneous matter, so as to form what is usually denominated an issue; nor to keep a blister open. The cases I have related are, three of them those of adults, and one the case of a boy; but this is a very common disease at an early period of life, more common than at a more advanced age. Children at the age of two or three years, immediately on beginning to make progression up to the age of puberty, show a disposition to the setting-up of such disease. In such children it is not an uncommon practice to employ a perpetual blister, as it is called. A blister is applied, the cuticle is raised, and then an ointment, composed of the savine ointment and unguentum lyttæ, is applied to it, morning, noon, and night, for the purpose of exciting a discharge. A discharge is excited in that way, but greatly at the expense of the patient. The irritation which in this manner is excited, is such as to make a greater call upon the constitution than the pain which previously existed from the disease, and therefore weakens the patient most amazingly. I have found that in such cases a repetition of blisters is infinitely better than keeping one perpetually open. If it be a disease that will not yield to a blister, or a repetition of blisters, it is better to employ the moxa, as the irritation of the moxa is not attended with pain, nor does it make the same call on nature that a large blister does, which is kept continually open.

The same reason I have against the continuation of an open blister, is applicable to the continuation of an issue; for if in the case of an issue you use beads, or beans, or peas, there is a great drain on the constitution, a great irritation kept up, and, in fact, an aggravation of the disease. In the ordinary cases, such as I have detailed to you to-day, the use of the simple moxa, allowed to heal, and then applying it again, if need be, is much better than introducing any extraneous matter for the purpose of keeping it continually open. It throws off a slough, and yields a certain discharge, which is as much as these cases require, independent of attention to the secretions, and any other necessary local treatment.

In one or two of the cases we have had, we have thought it necessary to procure rest by artificial means, by morphia or opium. The quiet produced in that way is favourable to the restoration of the natural state; and your medicines or local remedies have a much better opportunity of doing good if the patient be kept quiet, than they have where the rest is disturbed, which it usually is from his sufferings.

The treatment, so far as regards these cases, has been beneficial; one case has been presented cured, and two of the others may be considered as convalescent.

In one of the cases which I read to you, we find that the cure has been interrupted by general disturbance. The patient, as he states, caught cold, and has got rather a severe febrile disease upon him. You must suppose that sometimes local disease becomes aggravated during the prevalence of fever, which is not connected with it. This is the case here. The fever is not sympathetic, but it has been induced by cold, and therefore induced by a cause which is entirely independent of the disease for which the patient came in. The fever, however, has had its influence on the local disease; the boy is not strong, he is rather of a scrofulous habit, and the general powers have been lessened by this attack on the general system; the consequence is, that the local affection has become aggravated, and will continue so till we have subdued the febrile symptoms, and rallied the general powers, by appropriate remedies. At present he is under the influence of such remedies, merely,

as are calculated to check the influence of the fever; he is not in a situation to bear tonics, but as soon as he is they will be given, and you will find the local symptoms will again be subdued after the fever has been overcome, and he is restored to better heath.

I am afraid the time will not allow me at present to go into the other cases, but they will be more valuable for observation hereafter, as they will then show more of the process of cure.

ST. THOMAS'S HOSPITAL.

CLINICAL LECTURE

ON A CASE OF

CHRONIC GASTRITIS.

Delivered in the Session 1835-36.

By DR. ROOTS.

The first case, of which I shall now speak, gentlemen, is a case of chronic or sub-acute gastritis occurring in Luke's Ward, in the person of Henry Free, who was admitted on the 1st of October. He was thirty years of age, and by trade a hatter, and he stated that he had drunk very freely of spirits, chiefly of rum, but that he had been generally healthy up to about three weeks before his coming into the hospital, when, after a long walk, and getting into a state of perspiration, he was seized with shivering, followed by heat and sweating, with pain, swelling, heat, and redness of the right leg. This swelling of the leg it appears was treated by incisions and fomentations. He took at the same time, according to his account, some aperient medicine, and under this plan of treatment he appeared, or at least the leg appeared, to have rapidly recovered. As the leg got better he began to complain of sickness, more especially after taking food, which sickness was attended with some degree of tenderness about the epigastrium, and a sensation of burning heat at the back of the throat and fauces. These symptoms he found were very much increased by taking any stimulant into the stomach. The gastric symptoms had gradually increased in intensity up to the time of his admission, and then he complained of severe paroxysms of hiccup, occurring every five or ten minutes, attended with pain in the epigastrium, and occasionally by the ejection of a clear fluid, of a bitter and saline taste. He also complained of considerable burning sensation along the whole course of the œsophagus up to the back part of the pharynx, with great uneasiness after taking food, frequent acid eructations, and sometimes vomiting. The case was taken, as I am detailing it to you, by the clinical clerk, who states that there was some degree of tenderness over the region of the stomach. His appetite was bad; he slept badly, on account of the hiccup, which disturbed him very much during the night; pulse 94, rather sharp and hard; his bowels were usually moved once a day; the tongue was morbidly red over the whole surface, having on some parts aphthous points, and in others small, irregular, and irritable ulcers.

Now, when I myself examined him, I found that there was not only considerable tenderness on pressure at the epigastrium, but increase of heat there, and the man was considerably emaciated. He was directed, therefore, to be bled to the amount of ten ounces, to take two minims of hydrocyanic acid, and half an ounce of mucilage, in half an ounce of plain water, every four hours. The diet to consist of arrow-root and water, and sago and water.

3. The report of this day states that the blood was much buffed and cupped; pain and heat in the stomach somewhat diminished, as was also the hiccup; still sufficient hiccup, however, to prevent much sleep. Still, also, pain at the epigastrium, though it was considerably diminished. Aphthæ and ulcers of the tongue less irritable; pulse now ninety, and softer; the bowels open, the motions dark.

5. No hiccup since the evening of the 3rd, but he still complains of a burning sensation extending up the throat, and he yet has acid eructation after food. Still tenderness, also, over the epigastrium; tongue not quite so red; the small aphthous spots have nearly disappeared, and the ulcerations are looking more healthy. Bowels generally open every day, pulse 94 again, and rather sharp and hard.

6. I saw him again to-day, and directed twenty-four leeches to the pit of the stomach, and ten grains of the carbonate of soda to be added to each dose of his medicine,—the hydrocyanic acid and mucilage. As I did not think his bowels were sufficiently opened, and as I did not like to order aperient medicine, I directed that a common injection of gruel should be thrown into the bowels, night and morning.

7. Much better since the leeches were applied; no more rising in the throat, and the sensation of heat has nearly subsided. No hiccup since; tenderness over the epigastrium much less; the aphthous spots on the tongue have disappeared, and the ulcers are cicatrizing. His bowels have been opened by injections every morning, and the motions were free.

9. Still improving; but as there was yet some tenderness at the epigastrium, and, as

I thought, some increase of heat, I directed eighteen more leeches to be applied.

10. The leeches have relieved the tenderness considerably. There is no hiccup, no uneasiness after food, and no acid eructation; tongue much more healthy, and the ulcers cicatrizing; bowels have been opened twice very copiously; the two motions contained a little blood, the result, apparently, of some little irritation occasioned by the injection pipe. Pulse 96, rather small, but still accompanied by some degree of sharpness. He was directed in consequence of the little bleeding, and as his bowels were sufficiently open, to omit the injection.

12. The affection of the stomach much relieved; appetite much better; no tenderness over the epigastrium, and no further uneasiness after taking food. But at this time the left ankle became swollen and painful, and somewhat hot and red. A dozen and a half of leeches were consequently applied there, and afterwards the liquor plumbi subacetatis dilutus was constantly employed, with directions that he should take in the morning half an ounce of castor oil, and on the 13th the swelling, and tenderness, and heat, had in a great measure subsided. On the 16th he was still more improved, and he was directed to take his medicine only three times a day. This on the 18th was reduced to twice a day, with an occasional dose of castor oil. There is no uneasiness of stomach, no heat of throat, no sickness, no acid eructation after food; the appetite much improved; getting quite well; pulse 85, rather small, but quick. On the 20th he was nearly quite well, but as there seemed to be some degree of debility about him, I directed two grains of sulphate of quinine to be taken twice a day. On the 23rd he was ordered some beef tea.

27. Being now perfectly well, he was presented, with, I should say, no disease remaining.

Now this was a very plain straight-forward case. The man was clearly suffering under chronic or sub-acute inflammation of the mucous tissue of the stomach. There are two forms of the disease, the acute and the sub-acute, or chronic. The acute form is not, I believe, very frequently met with. I have only seen two examples of pure acute inflammation of the mucous tissue of the stomach since I have been in practice. One of these occurred in a young lady the near relative of a medical gentleman at Camden-town. The disease ran its course and proved fatal. The other was the case of a poor man in Somers-town to whom I was called in the latter stage, and which supervened on a severe attack of English cholera some years ago. The post-mortem examinations of these cases, proved them to be acute inflammation of the mucous tissue of the stomach.

But though the disease does not often occur in the acute form, we frequently meet with the affection in the sub-acute or chronic form; and the disease advances so slowly, that it may be readily overlooked, and only discovered when the mischief is beyond relief. Generally speaking, however, strict attention to the symptoms will enable you to detect it when it does exist.

The ordinary termination of the chronic form is generally in ulceration, or thickening, or softening, of the mucous and submucous tissues. The ulceration may consist either in a considerable number of minute ulcers, or in one of considerable size, affecting either the mucous tissue or the follicular glands of the stomach. As the process of ulceration goes on, the surrounding parts thicken, and, ultimately, perhaps the ulceration extends through the submucous to the muscular tissue, spreading even to the serous tissue; and if inflammatory action have not existed to a sufficient degree to excite adhesion to some neighbouring organ, the ulceration may extend through the peritoneal coat, and allow extravasation of the contents of the stomach into the abdominal cavity. Many such instances of the progress of ulceration, from the chronic inflammation, have occurred, without previous suspicion that such a condition of the stomach existed. Such extravasation would set up acute inflammation of the peritoneum of the abdomen generally. Sometimes, however, nature prevents this by adhesion to the liver, the spleen, or sometimes the colon; still of course the disease will ultimately prove fatal, though without extravasation.

The ordinary symptoms of chronic inflammation of the stomach are, a feeling of heat extending from the stomach along the œsophagus to the pharynx; thirst, diminished appetite, nausea, and vomiting. Commonly, also, I believe, you will find tenderness on pressure at the epigastrium, sometimes, as in the case I have read, of a severe character, but the inflammatory action may be of so low a character as necessarily to be accompanied by increase of heat not sensible to the touch.

In the early stage, the symptoms are very often only those which are common to dyspepsia. I do not, of course, admit the existence of such a disease of itself as dyspepsia, difficult digestion. In point of fact, that must be dependent upon some cause, or a variety of causes, often, in different cases; but we understand commonly by the term dyspepsia, functional derangement of the stomach, unaccompanied by inflammatory action, or by any change in the tissues. Let us see, however, what are the ordinary symptoms of dyspepsia, and you will find how nearly they approach to those of chronic inflammation of the stomach. You often have great acidity, eructations, flatulence, and oppression after taking food, frequently with some

degree of pain in the stomach. These are common to chronic inflammation of the stomach, in which, very often, the patient complains only of pain after taking food,—that pain, too, frequently ceasing entirely as digestion is completed, the patient in many instances saying to you, "I am quite well; I only know that I am hungry; I take my food; I only know that I am ill for such a time after taking food." In other cases the pain is much more prominent, extending often to the back from the stomach. Again, however, I would impress on you, that actual pain, unless you use pressure, is frequently denied, though patients will confess that there is a sensation of weight or oppression about the stomach; and occasionally you will find all these symptoms attended by pyrosis,—by the ejection of a clear, sometimes viscid, sometimes quite thin fluid, to the amount of from half an ounce to an ounce and a half, sometimes tasteless, sometimes acid, and sometimes both acid and bitter. Generally, however, as the disease advances, the symptoms become more urgent; the heat in the stomach is more distressing, the countenance becomes pallid and anxious, the vomiting more frequent, and occurring after every ingesta. The pulse at the same time is generally small, sharp, and occasionally accompanied by some degree of hardness. The tongue also most commonly exhibits some evidence of the disease. I say *most commonly*, because the tongue is not *always* a faithful indicator of inflammation of the mucous membrane of the stomach, though generally it is red nearly all over,—very often white at the back and centre, but morbidly red at the point and the edges,—sometimes covered by small aphthæ, and, as in the case related, by minute ulcerations also. But I again urge upon you, that you must not, because the tongue appears natural or white, conclude that gastritis does not exist. I have seen several examples of well-marked gastritis, where there was nothing in the tongue to indicate that fact. Generally, however, it is a tolerably good guide.

As to the causes of chronic gastritis, abuse of diet, eating imperfectly-digestible substances, the abuse of spirituous liquors, and protracted errors in diet, are all likely to be exciting causes. Suddenly drinking a large quantity of cold fluid, the surface of the body, perhaps, being much heated, or, more likely, the nervous system being much exhausted, has been not an unfrequent cause of inflammation of the stomach.

With respect to your diagnosis, it is probable that you will understand all that I wish you to comprehend on this subject, by going at once to the treatment. In inflammation of an organ so essential to life, antiphlogistic measures must invariably be employed, both in the acute and in the sub-acute or chronic form of the disease. Bleeding, generally and locally, are measures of primary importance, whenever there is much activity in the inflammation. Never hesitate in such a case to take blood from the arm; let nothing prevent your doing that, unless you are satisfied that the disease has been prolonged to such an extent that the powers of the patient will not justify that measure. Depend on it also, that you will be much more likely (I speak now of the sub-acute form) speedily to subdue the inflammatory action by one or two general bleedings, than by relying upon local bleedings alone, and more especially where vomiting is urgent. You will remember, that with respect to the man whose case I have related, I did not hesitate to take blood from his arm, and that it was buffed and cupped, and that the symptoms were thus somewhat relieved, the venesection not being required to be repeated. The subsequent application of leeches freely to the epigastrium was sufficient. But if the symptoms had not given way, if the vomiting, the hiccup, the heat of the stomach, had continued to be as urgent as before, I should have directed a second, perhaps a third, and perhaps a fourth abstraction of blood from the arm, before I began to rely on leeches alone.

In conjunction with bleeding, you will find counter-irritation of considerable advantage, but to this I would not resort until the activity of the inflammation was much diminished by general or local depletion. There can be no objection to occasional mustard cataplasms, because these leave spaces perfectly free for the renewed application of leeches. Therefore if you suspect that you shall have frequently to repeat the leeches, do not apply a *blister*; leave *that* until you feel pretty certain that you will not have speedily to reapply leeches. Do not understand me to coincide with some who I know have imagined that the inflammatory action of the mucous membrane of the stomach may be increased by a blister. I have never seen any such effect. In treating chronic inflammation of the mucous tissue of the stomach or bowels, I have, almost invariably, during some stage of the treatment, used blisters, and without ever having had occasion to regret their adoption.

As to medicines, if the vomiting be urgent, and there is much irritability of the stomach, I believe that the best thing you can give is the hydrocyanic acid, in doses of from one to two minims every two, three, or four hours, or even less frequently, according to the urgency of the vomiting. I believe, too, that it is useful to combine the hydrocyanic acid, as I did in this case, with some mucilaginous substance. Gum water is a nice soft application to an irritable surface. The aphthæ about the tongue are ex-

exceedingly distressing, and a little gum water will often allay the irritation.

If I can possibly do without purgatives, more especially the nearer the inflammation approaches to the acute form, I rather abstain from them in the early stage, confining myself to the use of injections; but if obstinate constipation takes place, and the injections are not sufficient to produce what you may think requisite, then I would suggest, as the best purgative by the mouth, some castor oil. Too frequently, however, that will not be retained, and if so I should prefer a full dose of calomel, combined, perhaps, with a grain of opium; not, however, giving mercury with the slightest idea of its producing a beneficial effect on the inflammation of the mucous tissue. This, I am quite sure, from experience, would increase it; and I would also advise you to avoid opium if possible, because it only tends to produce greater constipation, and when it is simple inflammation, rather aggravates that condition. The hiccup (the diaphragm sympathizing with the stomach) is sometimes very distressing, and you may occasionally be driven to the exhibition of opium, but I am quite sure that you can only give it, with propriety, as a means of deriving a temporary respite from the distressing effects of the hiccup, which it is far better to endeavour to lessen, indirectly, by diminishing the inflammation of the stomach. But supposing opium seems to be absolutely necessary; then, before giving it by the stomach, I would prefer throwing it into the rectum, in the form of injection,—thirty, forty, or even fifty minims, in a small quantity of starch or gruel.

You will remember, too, that during the early part of my treatment in the case of this man, on the second or third day—I added to each dose of the hydrocyanic acid and mucilage, ten grains of carbonate of soda. The acid eructations appear to be caused by a morbid secretion from the mucous and follicular glands, and which secretion, unneutralised, becomes an additional source of irritation in the stomach. The carbonate of soda, then, was given for its chemical effect, and its exhibition was attended with advantage.

The diet under such circumstances cannot be too simple. Chylification is evidently very imperfectly performed, and it would be absurd to task the stomach with food in large quantities. Nature would soon show the impropriety of it by vomiting the ingesta, with an increase of all the distressing symptoms. If the inflammation be very urgent, nothing but a little cold water should be given, or perhaps the best thing would be a small lump of ice placed in the mouth, to be thus slowly dissolved, and allowed to trickle down into the stomach. The patient I find generally derives great relief from the reduction in this manner, of the heat which extends from the stomach into the pharynx. Plain cold drinks, in fact, are most grateful, though, if the symptoms be less urgent, there is no objection to allowing the patient, as I did in this case, a small quantity of arrow-root, or sago, in water. Every stimulant ought to be most carefully avoided. This man himself stated, that everything he took that was "strong," meaning beer or spirits, aggravated his symptoms. You will find it of great importance to attend to this in private practice. You will frequently be called to cases which will puzzle you to decide whether they really arise from some slow and insidious inflammatory action in the mucous tissue of the stomach, or are merely the result of functional derangement, brought on probably by some intemperance in eating or drinking. Take it as a rule, in which you can never err, that if there is much heat of stomach, much tenderness in the epigastric region, and, more especially, an increase of heat there on pressure, you will be right in treating the case antiphlogistically, immediately debarring your patient from every stimulating article of drink and food, and applying leeches to the pit of the stomach, or if the pulse warrants it, abstracting blood from the arm. Supposing that you commit an error in diagnosis, and that it is only functional derangement (and I admit that sometimes it is difficult accurately to distinguish), you can do your patient no harm by the restriction of his regimen, the application of a few leeches, and employing counter-irritation; but you may do infinite mischief, under the idea of the case being merely one of a weak condition of the stomach, by giving stimulants, and tonics, prescribing carbonate of ammonia, allowing brandy-and-water, advising an increase in the daily quantity of his wine, and permitting him to live a little more "generously."

There was another case admitted at about the same time, in Anne's Ward, which I did not designate as *gastritis chronica*, but as *vomitus-cum-hysteria*, because I did not believe, though some of the symptoms were present, that it arose from actual inflammation in the stomach. I rather ascribed it to that peculiar irritation of the stomach which we often see in hysterical females; and the mode of treatment pursued, verified, I think, the diagnosis. As considerable pain was complained of (though there was no increase of external heat), upon pressure of the epigastrium, I thought it right to apply some leeches, two or three times, and afterwards a blister. There was here some slight degree of redness at the point and edges of the tongue, but much less than in the man, therefore, as a precautionary measure, I applied the leeches; but I found, after a time, that there existed so much of that peculiar morbid condition of the sentient extremities of the nerves, which almost universally accom-

panies hysteria, that the same degree of tenderness was complained of on pressure over the whole of the abdominal and thoracic regions. Considering, however, that there might be some insidious inflammation going on, which this would be the best means of relieving, I applied the leeches, knowing that the loss of a small quantity of blood could do no harm to a girl in her condition. But the next day, believing that there could be no inflammatory action in the stomach, I ordered her some creosote, which, upon increasing the dose from one minim to three, speedily allayed the irritability of the stomach. This quite convinced me that the disease could not be of an inflammatory nature, because I never yet saw creosote taken into the stomach where there was any thing like inflammation existing, without its producing either increase of vomiting, or increase of pain, or heat in the stomach, speedily after it had been taken. I was, in fact, confirmed in my original opinion, that this was a case of hysterical vomiting. I may allude to it again, in order to say a few words with respect to the advantage of creosote—at least, to the degree of advantage which I have myself found in its use—in gastric affections.

HOPITAL DES ENFANS MALADES, PARIS.

RESEARCHES INTO THE DISEASES OF CHILDREN,

CONDUCTED ON THE

KNOWN PRINCIPLES OF ANATOMY AND PATHOLOGY.*

TUBERCULAR MENINGITIS.

Child five years of age, of scrofulous constitution; sudden disappearance of an old affection of the scalp; for the two succeeding months headache, returning by irregular accesses; dulness; diminution of the intellectual faculties, and of motility; alternation of diarrhœa and constipation; pain in the abdomen; gradual wasting, and then constant headache, vomiting, followed by stupor, and incomplete paralysis of the limbs on the right side of the body.—Leeches behind the ears and to the temples; blisters to the neck and lower extremities.—Death; tubercular infiltration of some portion of the pia mater; granulations beneath the arachnoid, the pleura, and the peritoneum.

CASE.—Anne Camusat, five years of age, was transported to the hospital, from the Rue d'Angouleme, on the 30th of April, 1835. The parents of the young child, who themselves enjoy excellent health, and do not labour under any tubercular affection, inform us that she has never had convulsions during her infancy, but that she has been subject to glandular swellings of the neck, eruptions of the scalp, and ophthalmy. About two months ago a suppuration of the scalp, which had existed for the last two years, disappeared suddenly, and since that period the child has frequently complained of pain in the head; she has become dull, apathetic, and ceasing to take pleasure in the amusements of her age. At the same period she experienced pain in the abdomen, was alternately constipated and affected with diarrhœa, and became gradually thin, a circumstance attributed to jealousy; during the three first weeks of the month of April the child coughed a good deal, but the cough has disappeared within a few days.

April 29th. Constant headache; the prostration is more marked than for last few days; appetite diminished; on the 30th bilious vomitings.

May 1. We found the patient in the following condition:—Face pale and thin; answers only by monosyllables to the questions put to her, and points to the frontal region as the seat of the pain; the eyelids are closed, and the patient avoids the light; she cannot maintain the upright posture, but can raise up the limbs freely enough; the latter do not present any spasmodic movements; the sensibility of the skin is not remarkable, and is equal on both sides of the body; pupils normal; the sight is weakened, but still preserved; the face exhibits alternations of paleness and redness; the skin is moderately warm; pulse 72, intermittent; the respiration is slow and unequal, 16 in the minute; the tongue moist, covered with a slight whitish fur; the vomiting has not returned since the 30th; tumefaction and tenderness of the abdomen; constipation for the last four days.

From a consideration of the patient's history, and the *ensemble* of the symptoms which presented themselves, viz. frontal cephalalgia, sensibility to light, slowness and unwillingness to answer, the stupidity, the diminished sensibility of the integuments, the slowness and irregularity of the pulse and respiration, the constipation, &c., we ventured upon diagnosticating "a meningitis." However, the existence of this affection seemed doubtful to the physician of the hospital, who contented himself with ordering *an infusion of mallows, and a poultice to the abdomen.*

During the day the dulness and tendency to sleep persisted; these were interrupted in the evening by low cries; the alternations of flushing and paleness were now well marked.

May 2. Same sleepiness as before; no answers to the questions we address; eyes fixed; conjunctivæ injected; sensibility of the skin obtuse; movement is very limited; we are compelled to pinch the patient very strongly before we can rouse her; pulse 80; respiration 20; constipation persists; emis-

* The present paper forms a continuation of the cases and remarks which appeared at pages 29 and 33 of the present volumes of THE LANCET, under the above title.

sion of urine is involuntary. (*A blister to each ley.*) During this day and night the patient did not articulate a single word, or put forth a single cry; she does not seem to be conscious of what passes around her; and from time to time is affected with a trismus which prevents the introduction of fluids into the mouth.

May 3. The stupor is more profound; the pulse has risen to 90; respiration continues at 20. A more active treatment was now thought advisable; four leeches were applied to the temples, and four behind the ears; sinapisms were placed on different parts of the lower extremities; the little patient does not recognise her parents.

4. Pulse 108; inspirations 16; incomplete paralysis of the limbs on the right side of the body. *Four leeches behind the left ear.*

5. Patient is in nearly the same state as yesterday; no answers can be obtained from her; excretions involuntary; pulse 90, intermittent; inspirations 24. *A blister to the neck.*

6. The patient is not so stupid as on the former days. The eyes are now open. She distinguishes objects, and answers by signs to the questions addressed to her. When asked to point out the seat of pain, she carries the left hand to the head. The right hand still continues incapable of moving. During the day the amelioration seems to progress very considerably. The child has recognised her parents; asks to drink, with a clear, articulate voice, and answers several questions addressed to her. The suppuration of the blister on the neck is kept up. Sinapisms are applied to the inferior extremities. The patient is allowed some milk and broth.

7. The intellectual faculties present the same phenomena as yesterday; but the incomplete paralysis of the limbs on the right side still persists. The pulse is now much more accelerated; the respiration has become embarrassed; deglutition is difficult; pulse 130; inspirations 40.

8. To day the pulse cannot be counted, from its great frequency. The patient still answers a few questions. She asked to drink once in the course of the day, and then gradually sunk until midnight, when a convulsive fit terminated life.

Body Examined Thirty Hours after Death.

Body emaciated; members relaxed.

Head.—The volume and parietes of the cranium do not present any thing remarkable. The dura mater is healthy. The great cavity of the arachnoid does not contain any serosity. Underneath the arachnoid lining the convex portion of the left hemisphere, we perceive a number of small round bodies, of a tender yellow colour, hard as cartilage, and not larger than a millet-seed in most cases. Some, however, attain the size of the seeds with which birds are commonly fed. These bodies, clustered together along the traject of the vessels, form small irregular plates or patches, which when examined by a magnifier, after having been detached, appear evidently formed by a reunion of small granulations. Upon separating the convolutions we find some of them adherent together on the convex surface of the left hemisphere, these adherences being produced by the pia mater, which is infiltrated with a yellow, consistent, steatomatous matter. On the right side of the surface of the brain, we find some granulations, a few patches of much less extent than on the left side. On the lateral surfaces of both hemispheres, the granulations are disseminated, but they again become confluent in the fissure of Sylvius. The pia mater does not contain the slightest trace of purulent infiltration: it is merely infiltrated, in the intervals of the granulations, with a little serosity. The membranes lining the base of the brain are intact. The ventricles do not contain any serum. However, the cerebral convolutions are flattened, and the cortical substance is often of a light chocolate colour; the medullary substance moderately injected. The brain is, generally speaking, a little less consistent than in the normal state; but does not present any marks of ramollissement at any point. We cannot discover any tubercle in the substance of the brain, which was completely divided by very thin slices. The pons varolii, the cerebellum, and its membranes, are intact.

Chest.—Both lungs are free from adherences with the parietes of the thorax, but underneath the pleura which covers them, we perceive a multitude of small granulations analogous to those found underneath the serous membrane of the brain. In the parenchyma the tubercles are crude and much disseminated; the bronchial glands are also tubercular: the heart and its appendages healthy.

Abdomen.—Several convolutions of the intestinal canal adhere together by means of ancient false membranes studded with tubercles. We observe granulations underneath the serous envelope of the liver, spleen, and intestines in general. The stomach contains some residue of indigested aliment. On the anterior wall we observe the traces of two or three cicatrized ulcerations, round which the mucous membrane is pale and of good consistence. The interior of the rest of the intestinal canal does not present any thing remarkable.

Remarks.—This case presents several circumstances worthy of attention. Let us endeavour to seize the most remarkable. In the first place, let us notice the slow and gradual manner in which the inflammation of the brain was developed. This circum-

stance has been pointed out by several writers, particularly by ABERCROMBIE, but it was impossible to explain the reason of the insidious manner in which the disease so often commences and goes on, before the fact was established by recent researches at the Hopital des Enfans, viz., that in a *great majority* of cases denominated "hydrocephalus," "acute meningitis," "meningo-encephalitis," &c., the inflammation of the brain, or its membranes, is either connected with, or dependent on, the formation of tubercular granulations in the cellular tissue of the organ.

This fact, to which we shall have occasion to refer more fully at a future period, is one of immense importance in the history of cerebral disease, and gives the key to various other phenomena which have hitherto remained obscure, or totally unexplained—for example, the hereditary tendency to hydrocephalus, its frequency in families subject to scrofula, its attacking successively many members of the same family, the great length of time during which the premonitory symptoms may last, &c. In the case now before us, the first symptoms of cerebral disease appeared two months before the acute attack; the patient, moreover, was evidently scrofulous; and here let us remark, that the duration of the premonitory signs, together with the history of the patient's life, previous maladies, &c., affords the best, perhaps the only means of distinguishing tubercular meningitis from the simple uncomplicated form. The transition from the chronic to the acute stage took place on the 29th of April, when the headache became suddenly augmented, and was followed by bilious vomiting on the 30th.

The connection of these two symptoms, acute headache and vomiting, without any apparent lesion of the digestive organs, is of the utmost value in the diagnosis of meningitis. We have not yet made an analysis of the cases we possess to determine this point, but we may affirm with confidence that they exist in five-sixths of the cases. Constipation is another symptom which frequently accompanies meningitis. In the present instance, the influence of the brain on the intestinal canal was sufficient to suspend the habitual diarrhœa under which the patient suffered, producing in its stead a degree of constipation sufficient to indicate the use of active purgatives.

But the symptom upon which we would lay the greatest stress, is the state of the pulse at the time of the patient's admission. It was seventy-two on the third day of the disease, and (if we reason from the analogy of many other cases which we have observed) was not probably more accelerated during the two first days. This is a point upon which a grave error exists, even in the writings of the very best authors upon diseases of the brain; it is a doctrine received almost universally, that in the commencement of meningitis the pulse is febrile or accelerated; that the pulse *falls* as coma supervenes, and rises again shortly before death; indeed, we heard M. ANDRAL profess the same doctrine but a few hours before the present remarks were written. The present case is sufficient to demonstrate the contrary fact, and we possess ten or twelve other cases in proof, which we could bring forward were it necessary. In a great many cases of tubercular meningitis, the pulse is slower than natural at the very commencement of the disease; it preserves this slowness for one or two days, then mounts to eighty or ninety as *coma* supervenes, and gradually becomes accelerated, with the other symptoms of cerebral compression, until the patient's death, when it often reaches 140, 150, or 160. Instead of finding the pulse accelerated during the first two or three days of meningitis, we have frequently seen cases where the artery gave seventy, sixty, or only fifty, pulsations in the minute, and this at a period when the only symptoms of the disease were, headache, followed by vomiting, a very slight drowsiness, and irritability on touching the patient; with these symptoms we cannot admit the idea of effusion; besides, the slow pulse (as in the present instance) has been frequently observed where no effusion whatever existed in the ventricles. In many other cases, certainly, it does happen that the circulation is accelerated at first, then falls a little, and mounts again; but this may occur equally without effusion as with it, and, moreover, does not present itself so often as the case in which a slow pulse manifests itself long before the supervention of coma and insensibility.

The point of symptomatology we have now stated, is one to which we call the attention of those who have opportunities of studying extensively diseases of the brain.

We are persuaded that it is one of very great importance in the diagnosis of meningitis, and that in conjunction with severe headache, followed by sympathetic vomiting, it is sufficient to establish the existence of a malady which has hitherto remained obscure, perhaps as much from the inaccurate manner in which it has been observed, as from the real difficulties that accompany its investigation. In fact, we are not acquainted with any other disease whose general symptoms simulate those of meningitis, in which this remarkable slowness of the pulse is to be observed.

A third circumstance worthy of notice, was the recovery of the intellectual faculties, and the power of speech, at an advanced period of the disease. This has been pointed out by several writers, who judiciously warn us against being deceived by this apparent amelioration. We have had an opportunity of witnessing this phenomenon more than once, not only in cases where the inflammation occupied simply the surface of the brain, but where the meningitis was accompanied by very considerable effusion into the ventricles.

Finally, we may notice the coincidence of tubercular deposits in all the other great cavities. This is an important fact in the history of tubercular meningitis. We have never observed (nor are we aware that any such case has yet been recorded) an example of tubercular meningitis, without, at the same time, finding a deposit of tubercular matter in the bronchial glands, the lungs, the mesenteric glands, or underneath the peritoneal lining of the contents of the abdomen. In two cases we have observed tubercles in the kidneys. This, we repeat, is a capital fact. The coincidence of hydrocephalus (in our view the same disease as meningitis, the presence of serosity having little or no influence on its march and symptoms in a scrofulous constitution), was long ago suspected, and even announced, by Drs. PERCIVAL and CHEYNE, and several other of the best writers on this disease; but the fact was never demonstrated in a rigorous manner, until the researches made within the last three years at the *Hopital des Enfans Malades*, by Messrs. GERHARD of Philadelphia, RUFZ of Martinique, CONSTANT of Paris, and ourselves. Since that period we have observed a consecutive series of more than forty-five cases of acute meningitis terminating in death. Nine-tenths of these presented a greater or less trace of tubercular affection of the meninges, and in all there was at the same time a deposit of tubercles in the cavities of the chest or abdomen.

P. H. GREEN.

TREATMENT OF FRACTURES WITHOUT SPLINTS.

TROUGH FOR THE LOWER LIMBS.

To the Editor of THE LANCET.

SIR,—I entertain no doubt that your readers have been strongly interested by the letters on the treatment of fracture, recently published in THE LANCET by Mr. Radley, of Newton Abbott. For one, I freely confess that the simplicity of his statements, and the highly practical character of his reasoning, have excited a very convincing influence upon my own mind; the more so, as I had in the following case, which I submit to you for publication, an opportunity of corroborating, so far as one case can do it, the principle maintained by Mr. Radley, viz. that in fractures of the long bones "splints may be dispensed with."

Case.—Mr. Richard Barker, a stout, elderly gentleman, while out with a coursing party near Cove, in Yorkshire, had the misfortune, in attempting to spring over a ditch (not on horseback) from the top of a stake-and-bound fence, to trip, in the act of precipitating himself forward, and fall, with the right leg bent under him. The tibia was broken across, about three inches below the patella, and what was quite as bad, the parts investing the knee-joint sustained such a violent wrench as to be followed by considerable inflammation and an ecchymosis, extending to the hip. He was fifteen miles from home, and extremely anxious to be nursed by his family, but the limb was carefully and skilfully reduced by Mr. Hill, surgeon of Cove, who, probably with a view to keep the limb steady during the journey in a post-chaise, had applied splints, firmly bandaged. I visited him at his own house on the same evening, about six hours after the accident, and found him suffering dreadfully. A mattress and bed having been laid on the floor of a small back-room, looking into his garden, he was conveyed there and stripped of his clothes, when I discovered that it was highly necessary, from the amount of heat and swelling, to undo all the bandages, for that night at least; twelve leeches were then applied to the knee, and a gin-and-water lotion was directed to be applied to the smoking-hot limb. These soon placed him in a state of com-

parative ease. The broken leg was merely laid in the hollow of a soft pillow, and the foot was kept erect by means of a heavy box, which afforded it a convenient prop.

In the meantime a strong iron rod, lengthened so as to allow it to reach across the room, was hung upon two hooks, at six or seven feet from the floor, so as directly to traverse the foot of the bed. A heavy piece of mill-board, eighteen by twenty-four inches, after being soaked in warm water, was then doubled upon itself, so that its sides approached each other within about ten inches, so as to form a trough, nearly a foot deep, into which was carefully spread a nice soft thin pillow, having a many-tailed bandage beneath. The sides of the trough kept the foot upright, and in preparing it I tore a piece out, to allow the ham to rest at ease; for the board, in a case like this, must be long enough to come quite up to each side of the knee, and project a few inches beyond the toes, and likewise be so deep as to completely receive the foot and rise above it. A piece of very strong tape, two yards long, was next passed under each end of the trough, and kept from slipping by holes bored through the upper corners of the mill-board. After the leg had been laid in this apparatus, the ends of the tape were tied together in one firm knot. A double cord, running through a swivel-ring that was made to slide along the iron rod, was let down and fastened to the knot, and the whole was thereby gently drawn up an inch or two, to clear the bedding, and was tied and made secure. To this he himself added what he called his "bridle," viz. a piece of cord fastened to the trough, and brought across the bed to his hand, so that after a few days he could steer the whole concern with great precision.

Mr. B. soon felt the convenience of this plan; he could turn in bed on either side without affecting the position of the leg and foot, and was enabled to ease nature with comfort and without assistance. After three or four days, by means of a bed-chair, he could sit up in bed to read and write, take his meals, and wile away the tedium of confinement. With the exception of a saturnine lotion, and loose linen rag placed upon the upper surface of the leg, nothing more was required, and the case got quite well in six weeks, and would have done so sooner, had not the inflammation of the knee-joint delayed us awhile. The union is so neat and perfect as almost to defy scrutiny.

The support afforded by the trough on every side, rendered the many-tailed bandage unnecessary, and it was laid aside almost from the first. My patient would now and then ventilate the limb by propping back the sides of the board with a bit of stick, and getting us to draw down the creases of his pillow-slip, so that a plan which will enable a patient to attend to these small matters is no trifling improvement; for if the creases of a down pillow will, in the course of time, fret and torment a patient, what is to be said of splints and tight bandaging. The principle of treatment I consider to be the same as that of Mr. Radley, viz. the absence of undue pressure, the convenient access of ventilation, and other kindred means. The trough is, as I have described, by no means a substitute for a splint, but merely a convenient support, *without pressure*,—at all times the grand *desideratum*, and, in the case of fracture of the lower limb, an improvement even upon that gentleman's very scientific system of treatment. I remain, Sir, your obedient servant,

HENRY CHARLES SHERWIN,
Surgeon.

Hull, December 8th, 1835.

CASES OF BRONCHIAL IRRITATION

MISTAKEN FOR TRUE CROUP,

AFTER RUBEOLA;

WITH REMARKS ON THE

EXTERNAL APPLICATION OF CROTON OIL IN CYNANCHE TRACHEALIS.

To the Editor of THE LANCET.

SIR,—I transmit the following remarks for insertion in your highly interesting and useful journal, and remain, Sir, yours, &c.

JAMES INGLIS, M.D., M.R.C.S.E.

Castle Douglas, December 18th, 1835.

That epidemics are at their invasion more fatal, although less contagious, than at their height and decline, is a fact which long observation has confirmed. (Russel on Plague, p. 261.) The circumstances, however, are by no means universal, as was exemplified in this district during the recent stay of rubeola amongst us. It appeared, prowling about the country, in straggling cases, nearly five months ago. These became more numerous as the "epidemic constitution" advanced, till at length there was scarcely a family in which some members were not affected. It was not however until on the decline that the disease, which heretofore had been remarkable for its mildness, assumed an alarming aspect. Instead of running its course in its usual period, it became more irregular, the rash not appearing until the fifth, sixth, or seventh day of the eruptive fever, and then appearing only perhaps on one cheek, remaining an hour or two, and again subsiding; or making its appearance, first on the lower extremities, and then on the face and upper extremities,

or perhaps on the legs alone. Several years ago, when rubeola raged here, the principal organs which suffered were the lungs. At that time the thoracic inflammation ran so high, that the abstraction of blood in large quantities was necessary, even in infants, and in many instances the regular pneumonic sputa were observed. The present epidemic is attended more by tracheal irritability than pulmonic, and the symptoms approximate those of croup. In only two cases, however, have I seen what might be called *regular croup*, and in them the "tussis clangosa" was well marked. In innumerable other instances there was an assimilation to it, and I believe that many such have been magnified, from mere bronchitic irritation, into formidable and successfully treated cases of croup. Of such is the following instance:—

Case 1.—H. C. a girl, æt. 8, was seized with measles, and treated accordingly. On the seventh day from the invasion, the eruption had faded, but the other symptoms became aggravated, the cough was more severe and urgent, the respiration difficult and sonorous, the pulse of considerable strength, and there was much pain of the trachea and upper part of the chest. A dozen leeches were applied, and, the bowels being torpid, calomel and jalap were administered. The leeching alleviated the respiratory symptoms, but severe abdominal pain, and tenderness on pressure over the umbilical region, quickly supervened. As the powder had not acted, an enema of oil was given her, which was soon returned, with very slight effect. Ten leeches were now applied to the abdomen, after which she experienced great relief, and had several copious stools. On the following day she continued to improve, until the evening changed the scene, when I was suddenly called, as the father expressed it, "to see the child die." On entering the room, I found her, indeed, apparently near death; the head, thrown back, was tossed from side to side; the countenance was anxious; the breathing so laborious as to threaten instant suffocation; and the pulse upwards of 160. I immediately bled her from the arm until an impression was made upon the pulse, and, the symptoms having abated in some degree, a blister was put on the chest, extending up the trachea to the chin. Next morning she was much better; the blister had risen well, but, the bowels being slow, and having experienced the greatest benefit from croton oil, I applied two drops of it to the blistered surface, and this not only acted as a counter-irritant, but also had the desired effect upon the bowels. From this attack the child in a great measure recovered; but being of a scrofulous habit of body, and being much weakened through the loss of blood, œdema of the feet and legs appeared about ten days afterwards. The anasarca speedily became universal, the respiration was greatly impeded, the resonance of the chest and the respiratory murmur became faint, whilst the sub-crepitous or mucous râle left no doubt but that the lungs, too, were œdematous. The child died in a semicomatose state, probably from effusion into the ventricles of the brain; but a post-mortem examination could not be obtained, from the prevailing vulgar prejudices against it.

In this case, some of the symptoms assimilated croup, but the cough though severe never had the pathognomonic sound, nor was the blood drawn in the slightest degree buffed. It was simply a local irritation.

The following case, whilst it is a contrast to the former, exhibits also the good effects of croton oil as a remedial agent in regular croup:—

Case 2.—I was called to see A. F., a child ætat. 3 years, three days after the subsidence of the rubeolous rash; her breathing was loud and sonorous; the inspiration difficult; the head thrown back; the eye suffused and watery; the arms thrown out from the body nearly at right angles, whilst sometimes the hand was suddenly raised to the throat, indicating the seat of suffering; the pulse was 180. These symptoms, together with the well-marked crowing cough, left no doubt as to the nature of the disease. Calomel and James's powder were immediately given, and a dozen leeches were applied to the upper part of the sternum and on each side of the trachea. Immediately after the wounds had ceased to bleed, an effective blister was applied, and more calomel and antimonial medicine was exhibited, by which two scanty greenish stools were passed during the night. Early next morning the dyspnœa and cough were nearly the same as on the preceding night. The blister had risen well; on the denuded surface I put two drops of croton oil. This acted freely on the bowels, and produced a marked irritation, which I did not regret, although it suppurated copiously; for, from the time of its application, the symptoms became less severe, and she made a rapid recovery. The croton oil seems to keep up its action on the bowels for several days after its application.

It is necessary to diagnose between these two kinds of irritation. In the one, depletion carried to a considerable extent is called for, even when the croton oil has been employed; in the other, more confidence is to be placed in, and less danger results from, local counter-irritation, as the detail of the next case will show.

Case 3.—M. C., four years of age (sister to the first-mentioned girl), was seized with measles; but the mother knowing the disease, as at that time raging, to be of a very mild nature, did not call medical advice

until the eruption had faded, and the tracheal irritation had fairly set in. The case resembled, as nearly as could be, that of her sister's, only the cough, if any thing, was more severe. As this was one of the first cases of that nature which had occurred, croup was dreaded, and she was in consequence freely depleted by leeches, and other antiphlogistic remedies were employed, by which the tracheal and thoracic symptoms were certainly overcome. But what was the result? When I called in the evening the little patient was fast slipping out of existence, in a low comatose state, with a small quick fluttering pulse. I immediately ordered her a strong beef-tea injection, which was retained about half an hour. This was ordered to be repeated every two hours. After the fourth she began to revive, the pulse got fuller and more moderate, and she was soon out of danger, but the complete recovery was slow. I am persuaded that had not these enemata been used, she would soon have been past all human aid, and *that* principally from the error committed in mistaking bronchial irritation for cynanche trachealis.

Before concluding, I may remark that children at the breast appear to be less liable to be affected by epidemics than those of stronger and maturer years. This, whatever may be its cause, appears to be a wise provision of nature; for neither could the infant bear with impunity a sharp attack of the disease, nor could the remedies requisite for its removal be employed with safety. The almost invariable answer of a mother, when asked regarding any one of her children which may have escaped some epidemic, when the rest of her family has been attacked,—that "it was suckling at the time,"—first led me to notice the fact; and I find that others also, on recalling to remembrance long-past experience, accord with the truth of the assertion. A brief case or two will suffice to show that there is at least some cause for this observation. The first is that of a woman, who, during the full blush of the eruption of measles, was delivered of a living full-grown child. She had a quick accouchment, and made a favourable recovery. It was her fourth child. Ere the measles had subsided the child was put to the breast, and continued to enjoy uninterrupted health, without even the slightest rubeolous spot.

The next case is that of a Mrs. R., who, having occasion to enter the house of a person labouring under typhus fever, caught the infection, went through the disease, and suckled her infant all the time, which remained unaffected; whilst a little sister, a husband, and a son, were all seized. And there is now a family under my charge, three of whom have been for the last three weeks affected with typhus, whilst the child in the cradle, in the same room, beside them, remains uncontaminated. Other similar cases I might mention, but I have already trespassed sufficiently in occupying so great a portion of these valuable pages.

ANEURYSMS OF THE THORACIC AORTA.

To the Editor of THE LANCET.

SIR,—I was lately requested to make an examination after death, of the annexed interesting case, the particulars of which, with a few detailed circumstances, in reference to the patient's history, I offer for insertion in your valuable publication. I am, Sir, your obedient servant,

CHARLES J. H. RAY.

Tonbridge, December, 1835.

Jeffrey B., ætat. 52, of a plethoric, unhealthy appearance, by trade a sawyer, and accustomed to hard labour, in the performance of which he had habituated himself to large drinkings, was, about twelve years since, suffering from a protracted pneumonic attack, that produced a troublesome cough, to which he was afterwards almost constantly subject. With this exception for the following ten years his health was tolerably good, or until he was accidentally struck by a heavy piece of timber on the upper part of his chest, which projected him forcibly against the axle of a waggon, near the centre of his back. At the time, he was informed that no fracture had resulted, but he was bled freely, and attended medically. From this occurrence to the period of his decease he always complained of much uneasiness in these situations, describing what he felt as a constant, dull, gnawing sensation, oftentimes distressingly aggravated. He had persevered in the use of the warm-bath, large doses of iodine, colchicum, and opium, the latter only appearing to be serviceable, by its composing influence. Cupping, also, and many varieties of counter-irritation, had been freely prescribed, but without benefit. From last September his sufferings increased considerably, and during his coughing, small portions of dark coagulated blood were frequently ejected. He was unable to exercise the left arm, to rest on the left side, or in a horizontal position, and could ascend the stairs only with great difficulty. On the 12th of November he felt much easier, and whilst exerting himself rather more than usual, coughed up a large quantity of blood, frothy in appearance, and of a bright red colour. This was followed by a state of coma, which continued for several hours. He was immediately bled, and suitable means were administered, but death terminated his sufferings in rather less than

two days from the occurrence of this circumstance.

Autopsy, 20 hours after death.—The whole body presented, externally, a pale sallow aspect, and appeared slightly distorted on the left side. That side of the chest was evidently much distended, and afforded a *solid* resonance on percussion, whilst on the right side a perfectly natural sound was distinct. Immediately on dividing the cartilages of the ribs, on the left side, a large quantity of serous fluid escaped, and within this cavity was contained upwards of a gallon of blood, about one-third of which consisted of firm coagula. The superior lobe of the lung on that side had, from the pressure, collapsed towards its root, but the inferior lobe apparently occupied its usual extent of surface, although so much altered in structure and appearance that it almost entirely resembled the spleen; in its interior was formed a cavity that might have contained two fluid ounces; and the pleura, on its posterior surface, was closely adherent to the body of the descending aorta, near the situation of the sixth rib. From this vessel, between the sixth and eighth ribs, a large aneurysmal swelling had existed, which had also become connected to the inferior lobe of the lung; its gradual expansion from within outwards had completely absorbed at least two inches of the seventh, and about half an inch of the eighth ribs, commencing at about an inch from their articulations with the corresponding vertebræ, and the fibrinous aneurysmal coagula were firmly embedded in this remarkable depression. The heart was of ordinary size and appearance, unusually flabby, and perfectly evacuated. The right lung was healthy. The whole body of the arteria innominata formed another vast aneurysm, which appeared to commence just before the origin of that vessel from the aortic arch; while its extent terminated at the bifurcation, nearly opposite the sterno-clavicular articulation of the right side. Its size was that of a large orange, and on its anterior aspect the parietes were ulcerated, and irregularly detached, to the extent capable of admitting a small egg. This large fissure was in immediate contact with the sternum, and from a mutual pressure had caused a considerable absorption of its substance, centred by two deep and distinct depressions, either of which was capable of admitting a sixpence, and near to the sterno-costal articulations of the first and second ribs on the left side. On attempting to raise the sternum, after a division of the cartilages, it was broken transversely in this situation, and exposed a carious state of the surrounding bony structure. The abdominal viscera were generally healthy.

INJECTION OF THE NITRATE OF SILVER IN GONORRHŒA AND LEUCORRHŒA.

To the Editor of THE LANCET.

SIR,—Having been the humble means of introducing to the notice of the profession the nitrate of silver as a local remedy in leucorrhœa and gonorrhœa in the female, and being interested in ascertaining whether the experience of others was likely to confirm the opinion I had entertained of it, I felt great satisfaction in observing so favourable a report as that contained in your journal of last week from the *North-London Hospital*. Dr. Elliotson, in his clinical lecture on a case of gonorrhœa in a female, when speaking of astringents and specifics given internally, remarks, "There is, however, a local application which is, I believe, recommended by many practitioners,* and which has, I think, by far greater power over gonorrhœa and leucorrhœa than any other local application, where there is no inflammation, and that is the nitrate of silver."

I shall make no comment on the above passage, except to observe that it affords me much pleasure to find the remedy favourably spoken of by so distinguished a member of our profession as Dr. Elliotson. My principal motive in addressing you, is to remark on the exceedingly weak solution which Dr. E. says he begins with, namely a quarter of a grain to the ounce of water. I need scarcely observe that I have used the nitrate of silver in those diseases of females in a variety of forms, and I have never found a solution of three or four grains to the ounce to create any painful sensations which have induced me to discontinue its use, or even to diminish its strength, unless, indeed, there existed excoriations, or a highly inflamed state of the parts; and as an instance of the extent to which its strength may be increased, I may notice the fact of a patient now under my care who has used it for a period of three years, in the proportions of seventeen grains to the ounce of water; this being the only remedy which has kept leucorrhœal discharge in check, and which I have no doubt has arrested the progress of organic change.

Permit me to suggest the necessity of avoiding the common pewter syringe, as, when used, a decomposition in the solution takes place. The short straight syringe I consider quite a useless instrument. The ivory or bone syringe,—my invention some time ago,—and which may be purchased at

* In a clinical lecture, published in THE LANCET of Aug. 11, 1832, Dr. Elliotson ascribed the proposal to employ this astringent in vaginal discharges, to Dr. Jewell.—ED. L.

most of the surgeons' instrument-makers (in the sale of which I have no interest, direct or indirect), will, I think, be found, from the material and shape, a convenient and efficient instrument, and may be used for injections of any kind. I have the honour to be, Sir, your obedient servant,

GEO. JEWELL.

Sackville-street, Dec. 22, 1835.

OBSTRUCTION OF THE NOSTRIL.

To the Editor of THE LANCET.

SIR,—I shall feel obliged if you will insert the following letter, and the remarks which I have subjoined to it, in your journal. The letter is addressed to me as the history of his case, by a patient. I am, Sir, your obedient servant,

S. PLUMBE.

Southampton-street, Dec. 14, 1835.

"Dear Sir,—As it appears that my case may possibly be instructive, I beg to hand you its history up to the time at which I consulted you. Previous to the attack which it describes, I had served during twenty-four years in India, and had never experienced severe illness of any kind.

"Shortly after a trip to Brighton, in August, 1834, I experienced a sensation of cold in my nose, with a catarrhal discharge, which soon afterwards became thick and offensive, causing me much annoyance. In December it became much aggravated, and in the subsequent May a partial obstruction of the right nostril took place, and increased daily. Shortly afterwards the left nostril became similarly affected for a short time, though only at intervals. The *right* nostril now speedily became quite impervious, and I found myself unable to draw air through it, or to expel air from the lungs by that passage. I experienced also great pain over the root of the nose, in the direction of the frontal sinuses.

"At about the latter end of May I consulted a surgeon at Brighton, and afterwards sought advice elsewhere, without any favourable result. I was recommended by one to use an injection of nitrate of silver, and by another to try one of tincture of kino, and a variety of other similar applications, all of which I patiently tried without effect. Other surgeons assured me that the constant sanious discharge from the nostrils, which excoriated my upper lip, and which had rendered me uncomfortable in society to an extent which I am hardly able to describe—might be got rid of by treating it as a gleet affecting the mucous membrane of the nose. Accordingly I used balsam of copaiba and cubebs, both locally and internally. Subsequently I was directed to use the golden ointment, and to thrust it up the nostril by means of a camel-hair pencil; and, as a last resource, to give a trial to the injection of chloride of soda; and, finally, with the hope that the disease really existed in the antrum, I had made up my mind to the extraction of a molar tooth. Sea-side leisure and pursuits did me no good, either as regarded my general health or the local affection. I am, your obedient servant,

C. S.

"To S. Plumbe, Esq."

Remarks.—The case of this gentleman is, so far as my experience goes, one which the profession will consider rather singular and instructive, for although suffering for so long a period, the sequel is, that by the most simple means he has been restored to a state of perfect health, in the course of a few days. On examining the nasal passages, I found the right perfectly closed by the contact of the Schneiderian membrane at the point of union of the vomer with the cartilage and the alæ, with the ossa nasi, a fissure presenting itself there, instead of the open nostril. A probe was introduced on the first day, with some pain. On the second day a small pledget of lint was passed through an eyed probe, and introduced, with a little pain, and some blood was discharged. The quantity of lint was increased from day to day, and, finally, the probe reached the throat, and gave the opportunity of applying the black lotion to a part of the ulcerated surface. The day after, the probe passed into the throat, and, to use the patient's expression, "hurt the root of his tongue." He could then pass a little air, by great exertion, through the nostril, and some minute flakes of curdy matter were blown out. The sanious discharge continued for two or three days, the nostril being still half obstructed, when the patent, by a forcible effort, expelled a large mass of curdy matter, which I take to be the inspissated pus,—the ulcerated surface having been pouring out a healthy secretion of matter, but the passage before and behind having been so closed as to prevent the egress of any but its most fluid parts. Whether this view of the case be correct or not, a very large lump of the substance described was blown out, with little effort, into the patient's handkerchief, and he recovered within a fortnight, by the application of the black lotion, with a camel-hair pencil. The right nostril is now even larger than the left, and the patient's health is better than it has been since the first attack.—S. P.

SOUNDS AND MOTIONS OF THE HEART.

REMARKS ON THE REPORT OF THE DUBLIN COMMITTEE OF THE BRITISH ASSOCIATION.

To the Editor of THE LANCET.

SIR,—The committee, appointed by the *British Association for the Advancement of Science* to examine into the nature of the heart's movements, and the causes of its sounds, have, after a series of experiments, arrived at some conclusions which are confirmatory of views which I have long since advocated in the pages of THE LANCET, and at other conclusions which are at variance with those views, and which I have been induced to quote and comment upon, from a desire to arrive at truth on a subject, which, to use the words of the committee, "from its importance, whether in a practical point of view, or as an object of philosophical inquiry, is deserving of further investigation."

The following quotations are from the report of the committee, as contained in the *Dublin Journal* for September 1835.

"*Section* 3.—*Conclusion* 5.—If the interval between two successive beats be regarded as divided into four equal parts; two of these parts may be allotted to the duration of the ventricular systole."

A similar opinion was advanced by Laennec, and since by Dr. Hope, but it has met with unanswered objections in THE LANCET of January 12, 1833, which contains the detail of an experiment by which the time from the commencement of the first sound to that of the second sound was carefully measured, and found to be a fraction less than one-third of the time, instead of two-fourths, as maintained by the committee.

"*Conclusion* 6.—The ventricles, in their systoles, approach the front of the thorax; and, by their contact and pressure against it, produce the impulse or beat of the heart."

In the natural state of the parts the ventricles must always remain in contact with the parietes of the chest, and can neither recede from nor approach them. If the ventricles did recede from the parietes, they would cause a vacuum between their anterior surface and the parietes; and this is so much at variance with physics and common sense as to be unworthy of a moment's consideration. In their deductions, the different experimentalists on the heart's motions have not calculated the effect of cutting away a portion of the parietes of the cavity containing the heart. They have drawn their conclusions after changing one of the terms of their proposition, and without making any allowance for that change. They have altered the mechanical relations of those parts whose motions they were about to examine; except as regards duration and succession, we might as well examine into the manner of the progression of an animal, having previously broken one of its legs, and set down its awkward gait for its natural movement.

If the above-mentioned alteration in the mechanical relations of the heart, and of the parts which enclose it, were allowed for, the results of their experiments would, I think, agree entirely with my description of the heart's movements contained in THE LANCET of February 8, 1834.

"*Section* 4. *Conclusion* 3.—That the first sound is connected with the ventricular systole, and coincides with it in duration."

That the first sound is connected with the ventricular systole had been long established: but that it is of equal duration will not, I think, be generally admitted; particularly as that duration is stated by the committee to be two-fourths of the time of one beat, in which case the duration of the heart's first sounds would be twelve hours out of twenty-four.

"*Conclusion* 4.—That the cause of the first sound is one which begins and ends with the ventricular systole, and is in constant operation during that systole."

On what ground is it stated that the cause of the first sound is of equal duration with the sound itself? There is no necessity for this. The sound of a drum is of longer duration than the blow which caused it; a harp-string vibrates long after the finger has struck it; and though the shock of the sudden tension of the ventricular valves be instantaneous, yet the vibrations excited by the shock of sudden tension may continue.

"*Conclusion* 7.—That it is produced either by the rapid passage of the blood over the irregular internal surfaces of the ventricles, on its way towards the mouths of the arteries, or by the bruit musculaire of the ventricles, or by both these causes."

Passing over the inaccuracy of stating the bruit musculaire to be the *cause* of the first sound—i. e. one sound to be the cause of another, I have merely to observe that the muscular sound of a powerful muscle bears no comparison in loudness to the heart's first sound; and if the passage of the blood over the internal surface of the ventricles be the cause of the sound, why does not the entrance of the blood during the diastole of the ventricles cause a similar sound? For be it remembered that the Committee state the duration of the systole to be two-fourths of the time of one beat; and, consequently, two-fourths only remain for a fresh supply from the auricles. Then, in both cases, the velocity of the blood being nearly equal,

why attribute a sound to the exit of the blood over a comparatively smooth path, when its entrance over a comparatively rough path causes no sound. Both of the above explanations are at variance with analogy, and they are equally so with pathology, for the loudness of the sound is, *cæteris paribus*, in the inverse ratio of the quantity of muscle; and when a bruit is heard, consequent upon the passage of blood over the surface of the ventricles, or of their orifices, the sound is so different from the true first sound, that it has become a diagnostic mark of functional or organic derangement of the heart.

The experiments of the Committee afforded no results which at all invalidate the opinion that the heart's first sound is caused by the auriculo-ventricular valves, and the only argument they advance against that opinion is contained in the following conclusion:—

"5. That it does not depend on the closing of the auriculo-ventricular valves, at the commencement of the systole; because such movement of the valves takes place only at the commencement of the systole, and is of much shorter duration than the systole."

The conclusions of the Committee afford, throughout, evidence that they consider the first sound of the heart to be a continued and equal sound; otherwise there has been a great omission in their not having stated the instant of its greatest intensity. *

The nature of the first sound is, however, a matter for the ear to determine, and not for argument; but I think I shall be generally supported in the opinion that it is an abrupt sound, and not continued and equal, as described by the Committee. If it be a continued sound, how could Magendie have supposed it to be the result of a blow, or an impulse of the heart, against the parietes of the chest?

My answer to conclusion 4 applies equally to conclusion 5; and I have merely to add, that the first sound occurs at the instant in which the valves close,—that the closure of the valves inevitably causes sudden tension of the valves,—that the sudden tension inevitably causes vibration of the valves,—and, therefore, as all sounds consist of vibration, and as no sound can exist without vibration, nor (within certain limits) any vibration exist without sound; and as, in the healthy heart, there occurs no phenomenon which is calculated to produce so abrupt and strong a vibration as the sudden tension of the valves,—from these facts and reasons I am led to attribute the sound to the valves. I am, Sir, your obedient servant,

E. L. Bryan.

London, Dec. 16th, 1835.

* Had this been attended to, the Committee must, I think, have been led to admit the explanation of the first sound, as well as that of the second, as first given by Dr. Billing, and first published in The Lancet of May 19, 1832, and since brought forward by M. Rouanet and myself, without, however, possessing the slightest knowledge, on my part, of Dr. Billing's Essay, or I should have acknowledged that priority to which, on this point, I consider Dr. Billing entitled.

LONDON PHRENOLOGICAL SOCIETY.

SKULL OF DEAN SWIFT.

At the second meeting for the session of this Society, a paper on the skull of Dean Swift was read by Mr. J. I. Hawkins. This skull was examined at the late meeting of the *British Association* at Dublin, and became the subject of an article in the Dublin Phrenological Journal, and other periodicals. Mr. Hawkins, on the present occasion, examined some points of debate which had subsequently arisen respecting it, and endeavoured to show that the real character of Swift was in accordance with the phrenological developments of the skull. The character of Swift in domestic life, and as an author, seems by many persons to have been greatly misunderstood; and amongst other individuals who made the examination of the skull a subject of ridicule against phrenology, was Doctor Macleod, one of the lecturers of *St. George's Hospital*, who adopted the vulgar belief respecting Swift, and strove to show either that phrenology had no foundation in truth, or that the skull was not the skull of Swift. As Doctor Macleod professed to be a medical man, Mr. Hawkins (probably on that account) took up his remarks, and allowed other writers to be answered in the reply which he had to give to the comments of the editor of Messrs. Longman's periodical.

The question respecting the identity of the skull was indisputably settled by Mr. Hawkins. Swift, being a dean of St. Patrick's, was buried in that cathedral. A short time since, some alterations were made in the edifice, which caused the exposure of the coffins of Swift and Mrs. Johnson, his "Stella." The circumstance coming to be known to Dr. Houston, of the Dublin College (whom Dr. Macleod describes in his pamphlet as a "buzzing busy-body") Dr. H., with "impertinent curiosity," as Doctor Macleod declares, helped to "ransack the coffin," in order to find "a stumbling block for himself and other fools." This "worthy," continued Doctor Macleod, then displayed his "deplorable ignorance and folly," on finding that the skull was a small one, by suggesting that the "mental powers" of Swift arose from "diseased activity." (Mr. Hawkins in his paper said, "that he remembered no such expression falling from Dr. Houston, either at the private examination of the skull, or at the

subsequent public examination," and he believed that it never was uttered.) Doctor Macleod then proceeded in his weekly pamphlet to show that almost every faculty of Swift ought, according to the doctrines of phrenology, to have been developed in a directly opposite extent to that which the skull was stated to present.

In briefly analysing the paper of Mr. Hawkins, it will be right to show, first, the grounds for believing in the identity of the skull, which was permitted to be temporarily removed (together with that of Mrs. Johnson) by the present Dean of St. Patrick, the Rev. Henry Dawson, for the express purpose of examination, when, also, drawings and casts of them were taken:—"There is no reasonable doubt remaining," said Mr. Hawkins, "respecting the identity of the skull. Dr. Houston declared that he himself took it from the coffin of Dean Swift, in the presence of several gentlemen. He also took from the adjoining coffin, on the same conditions, viz. that it should be returned in a few days, the skull of 'Stella,' Swift's female favourite, which skull Dr. Houston also produced at the meeting, and a more beautiful and well-balanced skull I never beheld. It was the beau ideal of a perfect female skull, and admirably harmonized with the character of Mrs. Johnson, as given by Sir Walter Scott, and some other of Swift's biographers. In order to satisfy some sceptics as to identity, the skulls, after having been exhibited at the meeting, were taken by Dr. Houston and replaced on their respective vertebræ, and several of the party ascertained the perfect fitting of the respective bones. Among the gentlemen present were several medical men from various parts of the United Kingdom; and a distinguished member of this Society, to whom I am indebted for this information (having myself left Dublin early on the morning after the public meeting), copied the inscription from the coffin of the Dean. This gentleman further informed me, that when the coffin was about to be first opened, the present verger of the cathedral said to the company—'Now we shall know whether old Richard Brennan told the truth or not. Brennan was formerly Dean Swift's servant, and afterwards was verger of this cathedral, until he became a very old man, and he used to say that the skull of Dean Swift was sawed in two before the interment, in order to take out the brains, and that he (Richard Brennan) held the bason to receive the brains.' Accordingly, on opening the coffin, the skull of the Dean was found sawn in two, to the very great astonishment of the verger, who had his doubts of old Richard Brennan's veracity thus removed. On the day of the public meeting," continued Mr. Hawkins, "I compared the skull with a cast which was a duplicate of the cast which is in the possession of this Society, and which is said to have been taken from the Dean after death, and I found, by accurate measurement, that the cast belonging to the Society must have been a cast of the skull exhibited at Dublin, after it had been sawn in two, and the integuments had been again drawn over the divided parts. The weight of the plaster had evidently pressed upon the upper piece of the skull, and forced it about an eighth of an inch posterior to the lower portion, leaving a sudden step at the middle of the forehead, or, rather, an inclined plane, formed by the integuments not bending to the sudden falling back of the calvarium. Some persons imagined that this was an enormous wrinkle in the integuments during life, but no phrenologist could be deceived as to the real cause of the irregularity."

Next as to the vulgar opinion respecting the character and qualities of Swift. His *amatory propensities* were supposed by Dr. Macleod to have been little or none, and he referred to the opinion expressed in Scott's biography of Swift, in proof of the supposition. "Scott (quoth the dub) says, his whole intercourse with Stella and Vanessa indicates the very reverse of an ardent or a licentious imagination, and proves his coldness to have been constitutionally inherent, both in mind and person." And, again, "The coarse images and descriptions with which Swift has dishonoured his pages, are of a nature directly opposite to the loose impurities by which the voluptuary feeds his imagination. The latter courts the seductive images of licentious pleasure; but Swift has indulged in pictures of a very different class, and dwelt on physical impurities, calculated to disgust and not to excite the fancy." The anti-phrenologist urged also, that Swift had very little, if any, love of approbation, and in evidence of his statement, he again quoted Scott in the following sentence:—"There were three peculiarities for which he was remarkable, viz., his originality, his total indifference to fame, and the distinguished excellence which marked him in all his undertakings. As a literary man (the proudest light in which he can be viewed, if we except his patriotism, and even of that he was not vain), the careless mode in which Swift suffered his works to get to the public, his refusing them the credit of his name, and his renouncing all connection with the profits of literature, indicate his disdain of the character of a professional author.'"

The *benevolence* of Swift, said Roderick, was very great, as the subjoined words of Scott testify:—"The Dean's real and discriminating charity aimed at a better reward than popular applause. Even in his latter years, when habits of economy had assumed the appearance of parsimony, they could not overcome his principle of benevolence;" and, again, "he was charitable and benevolent

to the extreme limits of a moderate revenue."

The *ideality* and *wit* of Swift were said by the anti-phrenologists to have been remarkably great, and his "Gulliver," his "Tale of a Tub," and his "Battle of the Books," were pointed to in evidence. His powers of *imitation* they declared to have been very small, Swift being, they said, the most original of all authors. His power of *language* they considered also was extremely limited, because he "seldom used any but his vernacular tongue," and employed words only as "a means to an end." His faculties of *comparison* and *causality* they regarded as remarkably great, on the ground that he was "the finest and most subtle reasoner" that ever entered the field of politics or controversy.

These opinions were placed in array by the anti-phrenologists against the following extract from the table of the developments found in the skull examined at Dublin:—

"*Amativeness*, large.
Philo-progenitiveness, large.
Love of Approbation, very large.
Benevolence, small.
Ideality, small.
Wit, small (skull thickened here).
Imitation, rather full.
Number, moderate.
Language, large (skull very thin).
Comparison, moderate.
Causality, moderate (skull thickened)."

In opposing the views of the anti-phrenologists Mr. Hawkins drew a character of Swift, which tended to show that his actual propensities and faculties were very different from those described by his opponents, and that they were, in reality, in very exact accordance both with the developments described in the above list, and with the following account of other organs measured at Dublin:—

Individuality, very large.	*Order*, full.
Form, large.	*Weight*, full.
Size, large,	*Eventuality*, full.
Locality, large.	*Time*, moderate.

"The average of all these," said Mr. Hawkins, "will evidently warrant the opinion that, at the lowest estimate, the term *rather large*, should be applied to the intellectual indication, the lower perceptives being *very large*, and the reflectives *moderate*." This remark was made by Mr. Hawkins in contradiction of a statement which became current, that the intellectual developments in the skull were very small, as compared with those which might have been expected in the head of such a writer as Swift. Amongst the biographers of Swift referred to by Mr. Hawkins in his estimate of Swift's character, is "the learned Dr. Beddoes, who, in the ninth essay of his work, entitled 'Hygeia,' has ascribed the vertigo, with all its distressing consequences, suffered by Swift in his latter days, to habits of early and profligate indulgence; and he has argued upon Swift's conduct towards Stella and Vanessa, as indicating the inflamed imagination, and the exhausted frame, of a premature voluptuary, who still courted pleasures which he was unable to enjoy." The same conclusion Dr. Beddoes was disposed to derive from the tone of gross indelicacy, of which Swift's writings afford so many proofs. Mr. Hawkins also observes that in his biography of Swift, at page 343, Sir Walter Scott, speaking of the impure tone of conversation prevalent in Swift's time, says, "Although Swift's offences of this description certainly far exceeded those of contemporary authors, the peculiarities of his habits and state of mind are also to be received in extenuation of his grossness." Again,—"his delicacy must have been only occasional and capricious, for his journal furnishes many instances in proof of how little that delicacy influenced his own correspondence with females."

Mr. Hawkins also quoted the following passage from Dr. Barrett's Essay on the Life of Swift, to show the gross animal propensities of the Dean:—

"Nothing is more observable in the true and undisputed productions of Swift, than the pains which he seems to take in raking together the most nauseous ideas, and dwelling upon the most indelicate images. It is unnecessary for me to bring examples of this strange propensity of his nature; which is the more serviceable to us, because he is almost singular in this respect, and it forms the strong outline that distinguishes him from almost every other writer. In a pamphlet which came out in 1704, called 'Some Remarks on the Tale of a Tub,' he is similarly described."

With regard to the extent of Swift's *benevolence*, Mr. Hawkins observes that Mr. Jeffery, in a number of the *Edinburgh Review* for 1816, says of the Dean:—

"He was neither a very dignified nor a very amiable person. The truth is, we think, that he was extremely ambitious, arrogant, and selfish; of a morose, vindictive, and haughty temper; and though capable of a sort of patronizing generosity towards his dependants, and of some attachment towards those who had long known and flattered him, his general demeanour, both in public and private life, appears to have been far from exemplary. Destitute of temper and magnanimity, and, we will add, of principle in the former; and, in the latter, of tenderness, fidelity, or compassion."

Respecting Swift's *love of approbation*, Mr. Hawkins said,—"I was informed in Dublin, as a notorious fact, that in a fit of benevolence, the Dean lent small sums of money to several poor men, with the intimation that it might be paid at convenience, but that shortly afterwards, in a fit of acquisi-

tiveness, he instituted legal proceedings against the whole of them, and thereby ruined many industrious men and their families." Scott also says that in Swift's latter days he was "moody, melancholy, and ill-humoured, and absolute on all occasions." In reply to the allegation that Swift was a man of great *wit* and *imagination*, and had little imitation, Mr. Hawkins quoted first, the remark of Dryden on receiving some poetical exercises from Swift, —"Cousin Swift, thou wilt never be a poet," which Swift never forgot, or pardoned; and, secondly, Mr. Hawkins referred to the following remarks by Scott:—

"He never attempted any species of composition, in which either the sublime or the pathetic was required of him. But in every department of poetry, where wit is necessary, he displayed, as the subject chanced to require, either the blasting lightning of satire, or the lambent and meteor-like coruscations of frolicsome humour. We look in vain, in his writings, for depth of feeling or tenderness of sentiment; although, had such existed in the poet's mind, the circumstances must have called them forth. The mythological fable which conveys the compliments paid to Vanessa, is as cold as that addressed to Ardelia or to Miss Floyd. It is, in short, a kind of poetry which affects neither sublimity nor pathos." Again,—"Yet this grandeur is founded not on sublimity either of conception or expression, but upon the energy of both; and indicates rather ardour of temper than power of imagination. *Facit indignatio versus.* The elevation of tone arises from the strong mood of passion, rather than from poetical fancy." And, to conclude the extracts on this head,—"But Swift, without ever trespassing into figured or poetical expressions, or ever employing a word that can be called fine or pedantic, has a prodigious variety of good set phrases always at his command, and displays a sort of homely richness, like the plenty of an old English dinner, or the wardrobe of a wealthy burgess. This taste for the plain and substantial was fatal to his poetry, which subsists not on such elements; but was in the highest degree favourable to the effect of his humour, very much of which depends on the imposing gravity with which it is delivered, and on the various turns and heightenings it may receive from a rapidly-shifting and always appropriate expression."

Respecting the opinion that Swift ought to have had, from his faculties, the organ of *Language* very small, Mr. Hawkins quotes from Sir Walter Scott the following passages:—"The government of Ireland dreaded his eloquence as much as his pen." And again,—"His powers of versification are admirably adapted to his favourite subjects. Rhyme, which is a handcuff to an inferior poet, he who is master of his art wears as a bracelet. Swift was of the latter description; his lines fall as easily into the best grammatical arrangement, and the most simple and forcible expression, as if he had been writing in prose."

Scott also observes that "logic, then deemed a principal object of learning, was in vain presented to the notice of Swift." This fact, said Mr. Hawkins, is in direct corroboration of the declared smallness of his organs of comparison and causality." In concluding his argument against the repeated declarations "that the character of Swift was the very opposite in every respect to the description given of his skull by the phrenologists, Mr. Hawkins said—"It may be remarked that Swift's very large individuality and form, large size and locality, full weight, eventuality, and order, will account for all his extraordinary powers of discrimination; and his very large secretiveness, destructiveness, and combativeness, combined with the above, would give that causticity to his satire, which made him such a pest to his friends."

We need not farther extend our extracts. We have suffered the subject to occupy so large a space in our Journal, chiefly because the skull of Swift has furnished, through misrepresentations and want of information, the most important occasion that has offered for many years to the enemies of the doctrines of Gall; and because, while the science of phrenology is one of great interest to medical men, too many of them have not time to examine the facts on which it is based, for themselves. We do not, ourselves, hold with many of the opinions that are entertained by its disciples, but we cordially concur with ANDRAL, in the general opinion expressed by him in a late address which he delivered as president of the *Phrenological Society of Paris*, at the annual meeting of the Society. A brief notice of the discourse appears in the Edinburgh *Phrenological Journal* for Dec. 1835:—"In this discourse," says the editor of the above-mentioned journal, "Andral endeavours to remove existing prejudices, by showing that Gall's leading ideas are in strict harmony with the principles which have always been followed by physiologists in endeavouring to discover the functions of the bodily organs, and that their truth is established by a body of evidence, direct and indirect, which it is impossible to resist. 'In 'what I have just said,' observed M. Andral, 'I have only one aim, and that is, to prove 'that the science of which Gall is the founder '*must henceforward be included among the grave* '*and serious studies of physiology.* The ques'tion is not now whether Gall or his suc'cessors have committed any mistakes in 'determining the functions of individual 'portions of the brain: even although none 'of the organs were yet ascertained, the 'fundamental principles of the science

'would not on that account have existed 'the less, and sooner or later they would 'have led to the accumulation of facts and 'the filling up of details. But if phrenology 'be true, do not concern yourselves about 'its future success, for there is no example 'of an important truth once fairly launched, 'having failed to make its way. It must, 'however, pay the usual tax of entry; some 'one must be put to inconvenience in its 'progress, and few people are fond of being 'set aside. *It has, moreover, the great fault 'of being younger than those whom it pretends 'to enlighten*; but let it alone, and it will 'soon throw all obstacles behind it with 'marvellous force.' We recommend these remarks to the serious consideration of such medical students as are deterred from the study by the influence of our own prejudiced professors. Andral's professional reputation and labours may be put in the scale against those of any of our living teachers."

The efforts of Doctor Roderick Macleod, and his coadjutors, to collect the "usual tax" from the new candidate for admission into the grave and serious field of physiology, form none of those "obstacles" which phrenology need use "marvellous force" to throw behind it.

WESTMINSTER MEDICAL SOCIETY.

Saturday, Dec. 13, 1835.

Mr. Richard Quain in the Chair.

ECZEMA.

Dr. Addison exhibited several wax casts this evening in order to illustrate the different forms of eczema. The Doctor congratulated the members on the fact that medical men were now paying that attention to the disease which it well merited and required, for the ordinary forms of the disease had hitherto been much neglected, indeed, he feared, treated with contempt; and the same with cutaneous diseases generally, although there was no class of diseases so little understood, and none more likely from a wrong diagnosis to affect the reputation of a medical man. He still maintained that the work of Willan and Bateman contained the description of Mr. Thompson's case of eczema, with the exception of the exquisite form of exfoliation. As to vesication existing in the case, he had not the least doubt of it, as it oftentimes required the greatest attention to ascertain, and might escape notice therefore. He did not doubt, in fact, that it was frequently overlooked. Why the exfoliation had proved so exquisite, he presumed, was owing to the vesication not being fully developed, and occasioning an effusion of fluid between the cuticle and the cutis vera, causing a dryness, instead of the general moisture that is almost invariably found on the surface of the skin. Dr. Copland had, with his usual acumen, mentioned at the last meeting the presence of gastro-enterite with eczema, but he (Dr. Addison) believed that it was difficult to say which produced the other, as eczema often arose from local irritation, and was benefited by arsenic and other irritants, which would not, he thought, be the case, if eczema were dependent on gastro-enterite, which he did not, therefore, consider essential for its production. Eczema was often mistaken for erysipelas, but if the vesicles characteristic of the two diseases were observed, the error would be prevented; psoriasis was another form of cutaneous disease, for which it was frequent to mistake it, but reference to the history would always rectify that blunder.

Dr. Johnson thought that the novelty of the case narrated by Mr. Thompson, consisted in the periodicity of the disease. Had Dr. Addision met with, or Bateman noticed particularly, this phenomenon?

Dr. Addison replied that the statements of patients could not always be relied on, but he believed that about seven weeks was the usual period at which attacks returned, and in one case described by Bateman they returned every month for a considerable period.

Mr. Thompson said that had any student referred to Bateman's description of eczema rubrum, he would not have recognised the similarity between it and his (Mr. T.'s) case. It was far from his intention to depreciate the merits of those authors. Since the last report the antiphlogistic treatment had been persevered in, and the patient had with benefit been bled twice; the blood was cupped. The subject here dropped.

Dr. Johnson informed the Society that it had to regret the loss of another member (Mr. Mart), who had been carried off very suddenly by hemoptysis. He was sent for to see him, on Friday, at seven a.m., in consequence of the hemorrhage, but was not able to attend until five p.m. In the meantime Mr. Lambert was requested to see him and he bled him. The blood drawn was cupped, the first hemorrhage did not exceed a cupful, and throughout the day the sputa was only tinged. At his (Dr. J.'s) visit, the pulse was somewhat accelerated, the secretion becoming more florid, and the cough more troublesome. The friends said that the patient had had a slight cough for two months, with but little expectoration. He ordered a grain of lead with half a grain of opium. The bowels were regular, but shortly after one dose was taken the bleeding returned, and proved fatal at nine p.m. Had any members seen a case terminating with equal rapidity?

Dr. Addison, finding that no post-mortem examination had as yet been instituted,

waived giving an opinion, but remarked that cases of supposed hemoptysis were sometimes found to have really been aneurysmal.

Mr. THOMPSON detailed a case which terminated as rapidly, the autopsy displaying an immense vomica, satisfactorily accounting for the result. A similar cause might be developed in the present case.

Mr. HORNE considered it but right to inform the members, in case an opportunity of ascertaining the truth should not be granted, that when he was requested to see Mr. Mart a short time back, it required not much difficulty to discover that his end was fast approaching, and of this he (Mr. H.) informed his friends accordingly; Dr. Clarke, also, under whose care he was from the beginning, had given no hopes of him.

Mr. LAMBERT declared with warmth that Dr. Clarke had not given any such opinion, but quite the contrary, and he (Mr. L.) also believed that his lungs were not affected.

Mr. HORNE intimated that there were gentlemen present who had heard the diagnosis of Dr. Clarke expressed, and Mr. DAVIDSON said that Dr. C. certainly had considered his case irremedial.

MEDICAL MAGNETISM.

After some further remarks from Mr. Verrall, and Drs. Stewart, Webster, and Blundell, Dr. Chowne requested Mr. Thompson to report the progress of medical magnetism since the last discussion on the subject.

Dr. SCHMIDT first satisfactorily explained to the Society how Dr. Faraday's name had been used, although not by Dr. S. himself, and also alluded to the statement made by Messrs. Watkins and Hill, who it appeared had now authorized Mr. Davidson to disown on their part all knowedge of the competition in magnets. Dr. Schmidt said (as we understood him) that Mr. Wilkinson of Pall Mall was delegated by Lord Scaresboro' to make the proposal before stated to those gentlemen, that it was accepted by them, and that their failure was attributed to the inferiority of the English steel.

Mr. HALE THOMPSON now stated with regard to the question whether the magnet could produce physiological effects on the human body, that he must answer "yes!" although Dr. Ritchie had denied the possibility of that result. As to its remedial efficacy, the time, he believed, had not as yet been sufficient to allow an opinion to be formed at the Ophthalmic Institution. From eight cases of amaurosis presented to Dr. Schmidt, four were selected, but these were not considered without their faults; in all lachrymation was produced, and great mobility of the iris. But this afternoon, through Dr. S.'s liberality in lending his magnets, and the candid manner in which he (Dr. S.) had explained his mode of operating, he (Mr. T.) had certainly produced a more decided physiological effect, by magnetizing a boy, who was received into the *Westminster Hospital*, with concussion of the brain. The pupils were dilated, and on first applying the magnet for three minutes, contraction followed, and on again employing it for five minutes, the same phenomenon occurred, to the complete satisfaction of himself and Mr. Snowden, a gentleman who had acted as house-surgeon to several hospitals. He thought it right to state, that, unknown to Dr. Schmidt, he had been told by Mr. Weiss that he could not undertake to make magnets of equal power to those of Dr. S.

Mr. HOLT stated that his daughter, who had been deaf for many years, and who had been placed in the circle of the magnets five times, had derived considerable benefit from their employment.

Dr. WEBSTER remarked, that out of the four cases which he had witnessed at the Eye Institution, only one received benefit; that of a lady, who affirmed that she could see much better after each application, all other remedies having failed to afford her any relief. In the second case the man saw worse. The other two received no benefit.

The PRESIDENT, before adjourning the meeting, remarked, that it was no unusual thing for amaurotic patients to say that they saw better after any new application was made.

THE LANCET.

London, Saturday, December 26, 1835.

DEPUTIES from the medical schools have been visiting the CHANCELLOR of the EXCHEQUER during the past fortnight, relative to the establishment of the new University. We hope that the whole of these bodies are satisfied with respect to the liberality of the scheme.

Still the draft of the proposed CHARTER is not before the public. Nothing, however, shall induce us to believe that the members of a liberal Government will shrink from placing before the community that document which it is their intention to convert into a law, by obtaining for it the sign manual of the King. The institution of the *Metropolitan University* will constitute an important epoch in the annals of the literature and

science of England. It will also affect, in great measure, the immediate interests of a large body of individuals, the conductors of scholastic establishments in and near London. The conduct, therefore, of the whole business should be as open, candid, and straight-forward, as the object sought to be accomplished is prudent, enlightened, and national. We repeat, however, that there will be no protection against the perpetration of what is unjust, unless a draft of the intended charter be circulated for the inspection of the public.

What species of folly or cruelty can be practised which would not find defenders? A correspondent, who has most unwittingly adopted the signature of "Philo-humanitas," maintains that the charges advanced by the profession against the Poor-Law Commissioners and the Boards of Guardians are not well founded, or justly advanced; and the writer attempts to establish the accuracy of his position, by referring to the willingness with which medical gentlemen have agreed to become parties to the contracts in the Unions, and by referring also to the powers which the Commissioners can by right exercise, in conformity with the conditions of the Poor-Law-Amendment Act. Suppose we concede all that our correspondent has advanced,* — suppose we allow that the Commissioners and Boards of Guardians possess a statute right to treat the members of the medical profession with disrespect, with harshness, nay, with cruelty,—suppose also that there are a set of mercenary adventurers, who, having no feeling for the character of the profession to which they unfortunately belong, are willing to sacrifice every other object to the promotion of their own sordid and base propensities,—suppose, we say, that all this is admitted, does the question between the Poor-Law Commissioners, the Guardians, and the public, assume no other aspect? Does it present no wider view? Why "Philo-humanitas," and other writers of his intellectual stamp and caliber, in the blindness and the zeal, or in the muddy-mindedness of their folly, appear to forget the sole—the only object for which the poor-laws were instituted, so far back as the days of Elizabeth—that of affording succour to the necessitous sick poor. This is an item in the account, which some of our hot-headed, over-zealous disputants will do well to include. The appearance of such a statement may be displeasing to the calculating political economists, and to the more philosophical, but still less generous utilitarians; nevertheless, it is quite certain that the mass of the English community, and, it is to be hoped, a majority in both Houses of the Legislature, will never forget that poor-laws were instituted for the protection of the poor, and that to such protection the poor are as much entitled as is the first lord in the kingdom to his landed estate. On a subject in which the feelings of humanity so strongly and convincingly admonish the mind that all attempts at mystification must fail in accomplishing their object, assuredly the people of this country—of course we refer to the *rate-paying* people—have not become so brutalized as to merge every question of human suffering occurring amongst the poorer classes of society, into a mere matter of pounds, shillings, and pence—in short, of setting up a saving of five shillings on the one hand, in comparison with relieving an afflicted fellow-creature from five days, five weeks, or five months, of bodily torture on the other!

Admitting, then, that the Commissioners and Boards of Guardians may, *by law*, exercise the right of giving to a medical practitioner the smallest coin in the realm for the treatment of the sick poor in an union of twenty or thirty parishes, we contend that the moral obligation which that law

* It would be useless to insert the note of "Philo-humanitas," as he attempts to prove no more than what we have, for the sake of argument, just conceded to him.

imposes, is altogether cruelly neglected, or is perverted into a base and unworthy object, which the provisions of no parliamentary statute ever can, or ever did, recognise.

When, therefore, a medical practitioner is insultingly offered a sum of money which is, confessedly, notoriously, an inadequate compensation for the labour which he undertakes, the executive authorities of the Poor-Law Amendment Act thereby virtually disregard the necessities and agonies of the afflicted poor, and they convert an Act of Parliament into a piece of insolent mockery. If the contract system, screwed down to the very last turn, be so exceedingly efficacious in the case of medical practitioners, why would not the same system be equally efficacious in fixing the salaries of the Commissioners and their worthy assistants? This branch of the subject must be mentioned in Parliament. It is really a pity that the Commissioners should be shut out from benefits which they so liberally bestow on other individuals. Why should *they* be encumbered with two or three thousand a year, when other persons might be found, equally competent to discharge their duties, for five hundred pounds per annum? If the contract system is to be pursued, let it be carried out to all functionaries throughout every department of duty in the new unions.

In making contracts with medical practitioners, every person, who is not utterly callous-hearted, will at once admit that the most scrupulous attention should be given to the means which the surgeon may possess of fulfilling the engagement which is enjoined upon him by the moral, as well as the written, obligation of the law. If the Poor-Law Commissioners could but behold in many, ay in most, country parishes, the destitute, poverty-stricken, wretched hovels inhabited by the claimants on parochial funds, they would deserve universal execration if they withheld from the sufferers the only consolation they could receive,—if they shut out from them their only source of hope and comfort in the hour of bodily affliction and mental agony. The Commissioners may state, perhaps, that they are uninformed on these subjects, and that they consider that their duty to the rate-payers, as well as to the poor, is best discharged by ratifying, in all cases, the lowest tender which is offered by any medical practitioner who has received from one of the public bodies a legal qualification for undertaking the duties of his profession. In such a consideration there is plausibility, but no humanity. On the contrary, as the Commissioners must know, it is not in the power of a surgeon to attend and do justice to many hundreds of poor persons located over a surface of many miles in extent, for a sum of money, amounting, in many cases, to not one shilling a head for the medicines and attendance awarded to each individual. A thrill of horror darts through the blood, when reflecting, only for a moment, on what must be the consequences, the fatal, direful results, of such a nefarious engagement. With a practitioner thus employed there can be no alms giving; *he* evidently is not in a condition to afford extra-official aid to the miserable objects of the law's solicitude. He must indeed himself stand in need of that very assistance which he is made the ostentatious puppet and instrument of giving to others, or he would not, he could not, allow himself to be a degraded tool in the hands of men who appear to be ever occupied in working out the double purpose of destroying the poor, and accumulating insults on the members of the medical profession. The Commissioners and the Boards of Guardians ought to know that the mere testimonial of professional qualification is not a sufficient voucher for the character of that surgeon who undertakes, by contract, to furnish every requisite medical assistance to the parochial poor. Knowledge and skill in such a case are not all that is required; there are principles of honour, moral attributes, of the existence of which the most undoubted and

positive testimony should be obtained before thousands of helpless creatures are placed at the disposal of his tender professional mercies. What evidence of moral character have the Commissioners and Boards of Guardians demanded and received from the medical adventurers with whom the contracts have been ratified in the Unions? The gentlemen of the office in Somerset House will be called upon to place copies of these certificates before the Legislature. The whole of this subject, indeed, we are resolved, shall be thoroughly and searchingly investigated. Instead of treating with practitioners of known and acknowledged respectability, resident amongst the poor,—moving in their vicinage upon terms of benevolent and familiar intercourse with the sufferers,—strangers have been chosen, whose only claims to notice have been,— first, that they carried in their pockets a piece of worthless parchment, called a "diploma," or "license;" and, secondly, that they would undertake, at less than a hangman's wages, to reduce, at a rapid rate, the number of applicants for medicines and parochial relief. The Commissioners know, and so do the Boards of Guardians, that they would not treat the horses in their stables, or the dogs in their kennels, in this manner. Not a man of them would send to a veterinary surgeon, or a "dog doctor," unless experience had given some assurance that the skill of the party would be exercised with honesty of purpose, and with kindliness of feeling. A rule, therefore, is adopted by the Commissioners and Boards of Guardians, in the treatment of the sick poor of England, which no man of common sense and benevolence would pursue in the treatment of brute animals. Can such a system be sustained? Impossible! It is too revolting to be tolerated. It is repugnant to the national character of Englishmen; and the Legislature, in its wisdom, will beat down,—crush for ever,—that authority which has been so grossly outraged by the Commissioners, by their insolent assistants, and by their too-compliant tools—the sordid Boards of Guardians.

When it is recollected that the medical contractors in the Unions are called upon to exercise their curative functions upon not only the most distressed, and most impoverished, but also the least informed, portion of the English community, too much stress cannot be laid upon the dependence which, in such cases, is necessarily reposed upon the humane integrity of the practitioner. In all instances of sickness, the surgeon, the physician, or the apothecary, can, if he be so disposed, conduct himself in a manner which shall deceive his unlearned patient; but in treating the inmates of our parochial workhouses and hovels, the sufferers are absolutely placed at the mercy of their medical attendant,—the *mercy* of a "contractor," who undertakes the medical treatment of the poor, resident ten miles from his dispensary, at a charge of from one to three shillings for each person—a sum not amounting to the cost of a single set of shoes for the bare-ribbed, half-starved hack which takes him to mock the groans of the sufferer. Have the Commissioners ever paused for the purpose of asking themselves this question,—If medical practitioners are adequately paid in such contracts, what ought to be said of their charges while treating the sick in the houses of respectable private individuals?

If, then, it be confessed that the payment, in the case of the poor, is *not* an *adequate* remuneration for the duties which the medical attendant is, by law and moral feeling, required to execute, with what show of justice can the Commissioners and their tools insist that the terms shall not be enhanced,—in a word, that a just compensation shall not be awarded? *A priori*, we should say that the practitioner who agrees to undertake the medical duties of an extensive union at an income varying from 50*l.* to 100*l.* a year (including all charges for medicines), furnishes by his own act, by the very proposal which he makes, the most

indubitable testimony that he ought to be spurned from the presence of the Commissioners. Such a man, indeed, not only offers to obtain money under false pretences, but at the expense of the welfare, nay the lives, of the most afflicted portion of his fellow-creatures. Such a man must carry the stamp of cruelty upon his brow. There can be no mistaking the characteristic features of such a being. He knows that in cases of fever, of inflammation, of visceral disease, he may neglect his patient with complete impunity; with complete impunity we say, because the mercenary brute is insensible to the throes of conscience. In the eyes of the relatives of the victim he stands exonerated from censure, even from accusation, because they are incapable of forming a notion of his guilt. *They* know not how often the visits should be made,—*they* know not the medicines which should be administered; the practitioner beguiles them with a soft assurance, with a smile of affability, but both emanate from the sanguinary spirit of a vampire.

Nothing can be more narrow-minded or unjust, than to regard the subject of medical contracts in the unions, as being exclusively a medical question. It may suit the purposes of factious and designing writers to restrict the limits of the inquiry within that narrow compass, but we can tell them that it shall be viewed upon a basis not less capacious than are the boundaries of England and Wales. It is strictly a *national* question, involving many of the noblest principles of humanity. As such, we shall again and again discuss the subject in the pages of this journal, and as such we firmly believe that it will be fully considered by a benevolent executive Government, and an enlightened Legislature.

Model in Wax, coloured, of the Otic Ganglion and its Neighbouring Parts. Published by Schloss, 1835.

In this exquisitely beautiful representation of an extremely interesting part of human anatomy, the modeller has submitted to our view all but a portion of nature itself. The imitation is so close, so signally striking and true, that the mind is unavoidably turned from contemplating the obvious purpose of the design, to dwell on the marvellous skill of the artist. So nearly animate is the model, that we might almost suppose it to be traced by the hand of Prometheus. Criticism on the production must consist wholly of praise. A more perfect work of art of this description was never submitted to the inspection of the profession.

THE LATE DR. TURNER.

[*From an Edinburgh Correspondent.*]

All the members of the profession here deeply lament the premature death of Professor Turner; for although he was not one of those brilliant stars whose rays have materially contributed to illuminate the dark paths of medical science, and his fame as a lecturer did not add much to the renown of the University, yet he was a man of considerable intellectual acquirements, a sound and judicious surgeon, and an assiduous and zealous teacher.

Dr. Turner was educated chiefly in Edinburgh, where he served an apprenticeship to Dr. John Thomson, and was a contemporary of Dr. Gordon, our eminent anatomist. He commenced practice in one of the East-India Company's ships, and was afterwards elected a Fellow of our College of Surgeons, where he became intimately associated with his old preceptor Dr. Thomson, who was at that time professor of surgery to the College. On the resignation of Thomson, Mr. Turner was appointed to the vacant chair. Some time afterwards, when Dr. Thomson succeeded in accomplishing the favourite object of his life, that object to which the whole energies of his intriguing spirit had been directed,—the manufacture for himself of a chair in the University, he contrived also to create a chair of surgery for his *elect* Turner. However much Dr. Thomson was to be reprobated for the manufacture of those chairs, and the mode in which they were obtained from the Government, no one had any personal objection to offer to Turner's appointment to one of them, though the object of the creation was palpable enough. The two self elected professors, backed by their political ally at Holland House, succeeded in making their chairs sources of considerable emolument, at the expense of the unfortunate students in the University, for they contrived to get both the topics on which they lectured, added to the curriculum of "learning" which the pupils were compelled to attend in the Edinburgh School.

Dr. TURNER died, after only a few days' illnesss, at the 46th year of his age, and scarcely had he taken his lamented departure for that bourne whence no traveller returns, before a successor to the surgical chair of the University became an universal theme of conversation in the medical world of this northern division of the empire. Hardly, however, had the subject been broached, when, to the dismay of some, and the astonishment of others, Mr. LISTON arrived from London. It is now, however, generally understood here, that the appointment of Sir CHARLES BELL is the alternative which will be consummated; but I am confident that I speak the sentiments of many, when I say that we want none of your London *pures* amongst us. You might as well send us a specimen from Rhubarb Hall, or a dowager from Pall-Mall East, equal, in poetical and in medical talents, to the distinguished individual whom your amiable President inflicted on the University of Glasgow. We are only astonished that a *pure* from one of your great hospitals should think of occupying so unprofitable a situation in Auld Reekie. There are several other individuals canvassing for the chair, and some of them of pretty good pretensions.

December 11th.

INTERCEPTED LETTERS.

"DEAR SIR HENRY,—It is singular enough that a few hours before your letter arrived, I had received the inclosed note, addressed to you from Madame V. You will perceive that she is *very* desirous to have the benefit of your able assistance. I am informed that she has an impression that the 'subordinates' under whose care she now is, do not understand her constitution so well as you do.

"MURRAY consents to publish your oration. It will not occupy more than thirteen pages of long primer type, well spaced, so that he fears that *one* shilling will be more than it's worth. I told him, however, that you did not publish for profit, and that you would distribute many copies gratis—but that he need not throw off more than 150, or 200 at most, for the *first* edition.

"I have had much to do with PARIS. He is one of those old birds that is not to be caught with chaff. I shall, nevertheless, keep rallying him, and driving at him. In the meantime, something under the name of 'Lectures' on Materia Medica must proceed in the Strand. We must get some one to act as *pro-tempore* lecturer. I imagine that none of the Fellows will undertake the unprofitable task; but, doubtless, some one or other of the Licentiates, on being asked *by a Fellow*, would not object to the *labour*, though the *title* must be worn by PARIS who, I am happy to assure you, will have no objection, for the sake of the College, to be called *professor* at least during the winter. He has made a kind of promise to lecture in January, but *you* know what *promises* are. He is evidently flattered by your opinion of him, to which I myself added that you thought there was something very imposing in his personal appearance, and that in a *gown* he would make a most interesting and impressive lecturer. I have also assured him that he will have numerous invitations to dine with the Archbishop. This pleases him, for no man enjoys a gastronomic fete more than our friend PARIS.

"Nothing is talked of in the scientific world but the new Metropolitan University, and none of us can find out a man amongst our Tory friends, who can approach the Government without a suspicion being created, that would injure rather than help our sacred cause. There are only two individuals whom we can think of employing to discover the secrets. I allude to HOLLAND and BRODIE. They are both, as you know, every body's men. HOLLAND'S habits would enable him to find out something, and BRODIE, who loves to work under-ground, might contribute his aid. I know your dislike to any thing like intrigue, but we *must* employ men of that kind when circumstances demand. The secrecy which is preserved respecting the details, affords us reason to fear that your apprehensions are too well founded, and that all our exertions will not avail to preserve from destruction the rights and privileges of our venerable institution.

"In the meanwhile, however, as a certain quantity of time must be required to carry the diabolical project into operation, we must strive to raise what monies we can for the support of the College. I have kept the Fellows in total darkness about our finances, and none of them know that the building is deeply mortgaged, and our income so diminished. Let us make an effort to get a few more applicants before the licensing system is crushed *by law*. There are several men who have been lately purchasing degrees abroad, who I think would jump at a proposition from our College. The Scotch degree market being shut up, the subordinates have latterly sent to Frankenhausen, or some such place in Germany, for degrees. I will procure a list of these from the city, and, if you approve, will at once propose to sell them our licenses. We must let them understand that the examination will be very mild, simple, and gentlemanlike,—just such as CLENDINNING, who, by-the-by, has regularly come over to our cause, was blockhead enough to tell the Parliamentary Committee he underwent at Oxford.

"As to our College evening *soirees*, I have

taken the liberty to assure the Fellows that you will, in your usual liberal manner, come forward to pay all the expenses of the tea, coffee, &c., and that they will take place the moment that political matters are so settled for the session that you know what ministers and dignitaries can safely be asked on the first night. I hope you will find leisure to compose a paper on the death of some more illustrious personages. To me it is unaccountable how great an interest all your papers create, and how much more people seem to wonder at the mode in which an *illustrious* man leaves this sublunary world than a man in the humble walks of life. We all look forward to your speech at our meeting on the 22nd, and we are full of anxiety to know more of the reasons why the Ministers have not consulted you in the new University scheme. I remain your dutiful and obliged servant, J. Mc. M.

"London, Dec. 1835."

"Dear Sir Astley,—Will you join a deputation from *Guy's Hospital* to the Chancellor of the Exchequer to ask the right honorable gentleman how far the new University scheme will affect our school. Deputations are going from St. Bartholomew's, the Middlesex, the Bricks and Mortar in Webb-street, and several other recognised schools, and we shall be proud of your company from our own. Ever yours,

"B. Harrison.

"Treasury, Guy's Hospital,
Southwark, Dec. 12th."

My Dear Sir,—I think you will get on better without me; I am very busy in my museum; but Mr. Balderson shall go as my representative if you do not object. In truth, however, I think it is a useless mission, for I expect that the Chancellor of the Exchequer will only tell your Majesty, as he may most correctly and wisely, that you ought to know a d——d sight better than he, what a liberal plan will do for all the schools.—I know well enough what it will do for our College. In fact, I have long been convinced that in its present form and constitution it cannot last. I don't speak of its fate with regret. It has had its day, and I may tell you plainly, that I intend, in the present inevitable state of things, *to give the Government all the support in my power*, in arranging their new scheme. Ever yours, my dear Sir, A. C.

"Conduit Street, Dec. 13th."

"Dear Mac,—Poor Warren is dead. You ask in your last why I have gone down every week to visit him, when I must have well known in how little estimation he held me. I am aware that Warren never appreciated my talents as he ought, but that was no reason why he should not reap the benefit of them when he was ill. And, besides, it was just to me that the world should at least *suppose* him to hold a high opinion of me, for I mean to skim the cream of his practice—such of it at least as is left. I was rejoiced to see, in our last number, the Manchester weaver's notice of the Chapter on Mind, in Elliotson's Physiology, and I can tell you how to turn it to account for me, who have worked so hard for *you*. It has struck me that the Professor at the London University is not unlikely to step into Warren's shoes, for Warren was also a liberal, you know, and to prevent this the opportunity occurs of getting up a cry of materialism against Elliotson. It looks rather odd, to be sure, to see the Manchester critic seizing at this time of day upon opinions which have been in so many old editions of the Physiology; but never mind that. It will seem to the public all new, and the way to proceed is this:—Advertise the Manchester article every where in connection with Elliotson's name. Attract attention to it through the papers. Call it an "Elaborate and Convincing Refutation of the Doctrines of *Materialism* broached in Dr. Elliotson's Physiology," or something of that kind—in capitals, well displayed; I'll pay the cost. You know me too well to doubt that. Only do it well; frighten the old women—every body—and raise a proper feeling of indignation in the public mind. These are "no popery" times, and all liberals should go to the stake. In the mean while I shall set every other wheel in motion to forward my object. I have plenty of time to attend to the matter, having given up my appointment of Medical Examiner to the East-India Company, though, by the way, I have sat in the chair so long—ever since I commenced practice (thanks to my uncle, the Governor)—that I leave it not without a pang. By-the-by, some, I find, suppose that the Company will give the appointment to a physician who is practically acquainted with the diseases of tropical climates; but I don't consider that at all a necessary proviso. Indeed, the credit I have earned in performing the duties, proves the contrary, and I believe it will be given to Hume, as the Duke has made interest for him. I can send you no articles at present; but if you are dry in a fortnight, I'll help you with a page or two. In the mean time be assured, that whenever I am away, my patients shall be sent to *you*; but don't order any *mica panis*, or else write too obscurely for inquisitive patients. Yours at all times,

"F. W. C.

"Brook-street, Dec. 5."

THE METROPOLITAN UNIVERSITY.

To the Editor of THE LANCET.

SIR,—As the enclosed letter to the Rt. Hon. T. S. Rice relates to a matter of great importance at the present time, I shall be obliged by its insertion in your pages. I am, Sir, yours, &c., JOHN EPPS, M.D.

89, Great Russell-street, Dec. 17, 1835.

To the Right Honourable THOMAS SPRING RICE, *M. P., Chancellor of the Exchequer.*

Sir,—When Vice clothes itself in the garb of Virtue, she is the more dangerous, because more difficult of detection; and hence, sometimes, even the good embrace her, without being aware, until the consequences of the embrace become apparent, of the hideous being they have acknowledged.

Thus attired is MONOPOLY.

To the hatefulness and the injuriousness of monopoly, the Government of which you were and are now a member, have testified by the measures introduced in various sessions, to destroy, or at least to mitigate, the evils of some of the most extensive monopolies. So that every unbiassed man, looking upon these proceedings of the Government, has come to the conclusion that the necessity is seen, on the part of the Ministry, of abolishing all monopolies, so far as such abolition can be effected with safety.

One monopoly that stands most in need of abolition is exhibited by the Universities of Oxford and Cambridge. These Universities exclude all save those who are of a particular creed, and thus make the honours of literature and science to depend, not upon a man's talent, but upon his religious opinions.

The atrocity of the monopoly thus created is now very generally felt, and a general cry for the abolition of the unsalutary power perpetuating this monopoly, has been raised through the kingdom.

To that cry it has not been possible, on account of the peculiar constitution of the Universities of Oxford and Cambridge, to pay any effectual regard.

What has happened? The evil is felt. Individuals, not content to wait till the removal of the evil shall be effected by the influence of public opinion, acting through the House of Commons, and through that House on the House of Lords, determined to realize the privilege of obtaining the power of conferring honorary degrees without the degrading condition of submitting to a particular creed.

These individuals, instead of going to the Legislature, and demanding that an University should be established in the Metropolis, combined together; and, by subscribing for certain shares, constituted a large proprietary of shareholders, who determined to raise an edifice, which, with its adjuncts of teachers, should be called "The University of London."

The building was raised; the teachers were appointed, and the system of instruction was commenced. Forthwith an attempt was made by them to obtain a CHARTER, not merely of incorporation, but to secure to them the power of conferring degrees.

It seems, moreover, from the nature of the motion of Mr. Tooke, in the House of Commons, on March 26th, 1835, that a royal charter of incorporation had been drawn up and approved of by the law officers of the Crown in the year 1831.

Now, Sir, what would have been the consequence of giving such a charter* to the London University? What but the establishing another monopoly? *a monopoly of teachers.*

The proof is easy. The object of a college and of all schools is *to teach.* The skill of the teachers, and the means possessed for the manifestation of that skill, ought to be the only grounds upon which any pre-eminence can be claimed. Each teacher becomes interested in communicating scientific truths in the most clear and comprehensive manner. There is a beneficial, a scientific rivalry, pregnant with advantage. But if there be any exclusive advantages possessed by particular teachers, what is the consequence? To render this apparent, take two lecturers, A and B, both of whom are equally talented. They make known that they lecture. They are equal in talent to instruct, and in the possession of means for instruction. Those anxious to be instructed hear of their intentions, and determine to place themselves under their instructions, some under *A* and some under *B.* But, by some contrivance, *B* has managed to obtain a peculiar and exclusive advantage; namely, that *his* pupils will be enabled, by attending his lectures, or teachings, to obtain a degree, which the pupils of *A* will not. Does it not follow that *plus* advantage added to *equal* talent must give *B* an injurious superiority? And, in addition, does it not follow that this superiority must be injurious to *A*? And is not the possession of such a superiority a manifestation of the exclusive principle,—a monopoly of the worst character?

Such a monopoly would have been established, had the *London University* obtained the charter which they sought. But they would have obtained a monopoly of a more glaring character, had the charter sought for been granted.

The senate would have been the examining body. The professors, or the teachers, would have become *the examiners of their own pupils.*

* *This* charter included the power of giving *medical* degrees.

It is true, Sir, that the plan now proposed by the Government obviates the latter evil. And in this view of this important matter every enlightened mind must agree with Mr. Hume, that "the Government is in the novel position of taking the lead of them" (the proprietors of the University) in the general liberality of the plan."

What then is proposed by the Government? It may be stated thus:—

1. That a board of examiners, to be termed the University of London, shall be authorized by charter to confer degrees.

2. That pupils from University and King's Colleges shall be admitted to examination.

3. And that any other bodies for education, whether incorporated or unincorporated, may, from time to time, be named by the Crown, and their pupils be admitted to examination for degrees.

Such are the intentions of Government; intentions indicative evidently of the fact, that degrees are to be conferred upon the prosecutors of every department of learning and of knowledge, divinity excepted.

To *this* no liberally-minded individual can object. But, in developing the intention, one circumstance occurs which mars the beauty of the plan. It is this, that while "the University" can confer all degrees save those in divinity (an excellent exception), the individuals on whom these degrees are to be conferred are not all who may be qualified by their learning and knowledge,—not all who have laboured hard to acquire every necessary information, but those only who have been educated at "any chartered college within the Metropolis."

Now, Sir, is not this giving a positive monopoly to the teachers in chartered colleges? Is not this as much as asserting that the education of students is better within the walls of a chartered college than within the walls of any other building? Is not this a spirit of intellectual consecration of bricks and mortar? Is not this a sacrifice to the god of wealth, because the largeness of the building seems to have some weight in the matter? Finally, Sir, is it not saying to those beginning their studies in London, "Gentlemen, go to the *King's College* and to the *London University* (to be called "London University College"); become pupils there, for there you will have talented lecturers: and there, in addition you will be able to gain honorary degrees?"

But, Sir, it may be said, that the Government plan is not so exclusive as this; for it is expressly stated, in the communication from Downing-street to the Council of the *London University*, dated Aug. 19, 1835, that "Any other bodies for education, whether incorporated or unincorporated, may, from time to time, be named by the Crown, and their pupils to be admitted to examination for degrees."

But, Sir, it is stated, in the preceding clause, that a particular class of pupils is *at once* admissible to examination for degrees; and this particular class consists of *pupils from University and King's Colleges.*

Here, Sir, is given at once a priority to those educational bodies *over other schools*,—and why? Are they better teachers at these thus styled "Colleges" than at other schools? Personal comparisons would be invidious, and therefore should be avoided. But it may be asked without fear, Is the education at either of these institutions superior, in reference to the production of real medical qualification for medical practice, to that given at the "private" schools, as they are called?

Let, Sir, an application be made to the examining Boards of the Apothecaries' Company and of the College of Surgeons, and let a report be presented from each body, of the pupils *passed* or *rejected*, as belonging to individual schools; and I myself, as an individual private lecturer, am quite willing to abide by the result, as a testification of the nature and of the sufficiency of medical education, as given at the private schools.

Is it then just, Sir, that the pupils of any one institution, or of any institutions, should have the priority given them of starting in this intellectual race for intellectual honours, in advance of the pupils belonging to other institutions?

I sincerely believe, from various sources, that it is the wish of Government to act in this matter with the greatest fairness; but is it not apparent that the *naming* the pupils of the *London University College* and of *King's College* is giving an undue priority?

It may be asked, "What then do you propose?"—I propose, Sir, that the Government of this country, recognising the grand truths, that science has no country, that scientific men have generally been those who have received no aids of collegiate education, should declare, that

Literary and scientific honours shall be open to every individual, who can prove himself qualified to possess those honours;

And that, in addition,

Those honours being gained, the individuals gaining them shall have every legal privilege connected with the qualification.

With regard to the latter point, it would evidently be absurd to give an honorary degree as *indicative of qualification*, and then, afterwards, to require the qualified to pass another ordeal, previous to the realization of the benefits of such qualification.

It is true that such a plan would require the sweeping away, *in the present state of society*, of many scientific, or rather pseudo-scientific, nuisances; but the gain would be immense; the loss would be nothing.

And what a noble memento of the Government such a proceeding would be! What a pleasurable satisfaction would arise

in the mind of yourelf, a member of such a Government, in contemplating the fruits of such a labour! And finally, what a thought to console at the close of an honourable life,—"I have been an instrument in removing a mighty barrier to the diffusion of education and enlightenment amongst the people."

Trusting, Sir, that you are capable of appreciating the high behests connected with the decision of Government on this important question, I have the honour to remain, your obedient servant,

JOHN EPPS,
Lecturer on Materia Medica and Chemistry, and Director of the Royal Jennerian and London Vaccine Institutions.

METROPOLITAN UNIVERSITY DEGREES.

REPLY TO THE LETTER OF "A KING'S COLLEGE STUDENT."

To the Editor of THE LANCET.

SIR,—I did not expect that the *suggestions* which I offered in THE LANCET of Dec. 5, respecting the conditions of granting degrees in the New Metropolitan University, would have met with the opposition which "A King's College Student" has offered them. I did not expect to be so hastily dignified with the title of "opponent," by a gentleman who is already in possession of those advantages which I merely suggested should be *extended to others*. But, Sir, as he has appealed to the public to decide which of us is right, I am induced to reply to his remarks, and shall then leave the subject with perfect confidence in your hands, satisfied also in what manner the public will ultimately decide on the question. My opponent takes occasion to reprove me for calumniating a body of men who are "*not yet called into political existence.*" How can I have effected that impossibility? However, the commencement of my letter shows that I did not refer to any set of *men*, but to a proposed *system*, which I conceived to be objectionable. But I proceed to his objections.

Certificates of *moral character*, he says, are frequently forged. To this I reply, that a written *character* ought not to be accepted, unless some means are taken to ascertain that it is authentic.

He objects to allowing young men to graduate without having been College Students, because, though it might benefit a few, it would ruin the majority, for many who do now attend lectures occasionally, would not then, he says, attend lectures at all. And suppose *students* did not attend lectures at all? Suppose they did not study? Why then they would be certain of not obtaining a degree. In fact, it is more than probable, that instead of the new system causing ruin to any one, it would *arouse students to a sense of the necessity of profound study*, and induce them to seize every opportunity of adding to their mental and professional attainments.

My opponent imagines that I think that students who neglect the lecture-room, are more profitably employed elsewhere in study. Those gentlemen who neglect the lecture-room do so, I should suppose, for far less noble pursuits than those of science. I quite admit the benefits of oral instruction. I merely argue that if a student does, without its aid, obtain as much knowledge as one who is in possession of its advantages, he ought to be entitled by law to the same honours, and the same standing in society.

My opponent next says, that a man cannot obtain sufficient knowledge from books alone, to qualify him to possess a diploma. I reply, that a Board of Examiners can fully test this. They can test his knowledge of anatomy and the operations of surgery on the dead body, his knowledge of the practice of medicine in the wards of an hospital, his knowledge of chemistry (if need be) in the laboratory.

He says, that the duration of the examination which would be necessary under the new system, would be so long as to render it impracticable in operation. I reply that a lengthy examination is not impracticable. As it is designed to secure the public against incompetency, the examiners would undoubtedly be fully remunerated for *their* time, and there is no other point than that in question. My opponent himself says, that certificates are often forged (and I know that they are often given without being deserved); how then can he support a system in which he would allow certificates to play *any* part in the conditions of granting diplomas?

His last, his most startling, and his only sincere ground of objection, is based on the supposition that the new system would tend to deprive the graduates, as a body, of their respectability. Why, truly, if respectability consists in the exclusion of all but the rich from literary or scientific honours, the new system most certainly would ensure *respectability* to the class of graduates; but if, as I apprehend, respectability belongs to the *mind* and not to the *pocket*, then what is the worth of my opponent's objection? For although he may exult at this exclusive system, although he may feel indignant at the thought of a "farmer's or a tradesman's son" aspiring to the honours of learning and skill, yet I can tell him that farmers' and tradesmen's sons deem it as much their right to aspire to reach the eminences of science, and will demand (if they should not have learnt from the corruption of a *bad system* to despise them) equal "honours" with those, who though rich, possess no greater

attainments. But the "Student of King's College" is liberal enough to say that he has no objection to the low-born being raised by their abilities to eminence *in a few instances*. And why so liberal as regards *a few*? Because he cannot help himself. Those *few* have raised themselves already. My opponent and the "exclusive" party, would grant no opportunities to low-born youths to raise themselves. But when, despite all obstacles, despite all prejudices, genius *has* broken through the castes of society, and raised itself by force of talent to its appropriate station, they *then* would "not object to a *few* poor students" occupying stations in the ranks of titled men of science. Whatever exclusions the rich in society may desire to enforce, nature has made no law which peculiarly fits the wealthy for the purposes of literature and science, but rather the contrary. Arrangements of society which set at defiance the laws of nature, are most iniquitous to God and man. In conclusion, let me express a hope that the "King's College Student" will now perceive that he has advocated some erroneous opinions. It is lamentable to hear a gentleman who professes to be a Student of Medicine, with a desire to obtain eminence in the science, supporting the cause of those giddy creatures whom he describes as forsaking the lecture-room for the excitement of dissipation, and doing so at the expense of ardent students who do not chance to be the sons of wealthy men. I am Sir, your very obedient servant,

A STUDENT.

London, December 15th.

METROPOLITAN UNIVERSITY DEGREES.

MONEY AND CERTIFICATE QUALIFICATIONS.

To the Editor of THE LANCET.

SIR,—In differing from the views of "A King's College Student" as expressed at page 420 of a late number of THE LANCET, permit me to make a few observations on the two great questions of subjecting candidates for medical degrees to a prescribed course of study, and leaving them to follow that which best suits their taste and convenience.

Your correspondent cordially agrees with the proposition, that an unequivocal certificate of good moral conduct should be required; yet according to his arguments for the present system as a means of sustaining the "respectability" of the profession, he would effect this object not by a written guarantee of morality, but by a plan which, while it affords the aspirant an opportunity to commit, enables him also to hide, "a multitude of sins." A pocketful of money it is clear not only opens to a giddy youth an enticing vortex of dissipation, but furnishes him with those "oblivious antidotes," the false certificates, by which he obtains admission to an examination, at a time when, probably, having exhausted his pecuniary resources, exigency compels him to stand the test. To the dread of this test, inadequate as it is, will such an one owe the little knowledge he may be found to possess, and not to any obligation imposed and inevitably exacted by the certificate system. How often does it happen that the candidate, after having squandered away his time, and deluded his friends by the display of certificates of "diligent" attendance on lectures, &c., has recourse to a "grinding," by which he is "crammed" in a few weeks with what is supposed to have taken him some years in acquiring!

Your correspondent's assumption that an expensive education is likely to be obtained only by persons of good birth, is erroneous indeed. Were the degrees given to a student to be measured by the length of his purse, the sons of "farmers" and "tradesmen" would carry much more respect than your correspondent seems to allow them. I recollect the landlady of a small country inn, who was bringing up her son as a "doctor," boasting that he would "come out as big a gentleman as any in the land," because, forsooth, she was plentifully supplying him with that which in her estimation could not fail to effect the object. This feeling, vulgar as it is, will have at least the appearance of truth on its side, so long as illiterate young men can find their way into the profession upon a money qualification.

As my object has simply been to show the fallacy of an hypothesis upon which is based many of the arguments in support of the certificate system (which, from observation, appears to me to work very ill), I here conclude. What alterations are most likely to answer, it is not for me to suggest. This is now, happily, the province of an enlightened body of individuals, to whose judgment, aided by THE LANCET, and the experienced voice of its Editor in the senate, the public may confidently commit the cause he has long so ably advocated. I remain, Sir, yours truly,

A LONDON UNIVERSITY STUDENT OF MEDICINE AND SURGERY.

December 17th, 1835.

ST. GEORGE'S HOSPITAL.

DISEASE OF THE BONES OF THE ILIUM.

WILLIAM HARDEN was admitted, Sept. 16th, into Winchester ward, when, Sir BENJAMIN BRODIE being out of town, Mr. CUTLER took charge of the case, who at once told the patient that his was not a

fit case for the hospital, and then added that he must take rest and apply poultices, these remedies being of great efficacy in such cases. The case in which this treatment was to be adopted was one of diseased bone of the left ilium, of eight years' standing, with two large sinuses (one leading from the trochanter major, the other from the sacrum), extending to dead bone. Leeches were afterwards applied, and house-physic was given, and on the 25th of September, Sir BENJAMIN first saw the man. We then learnt that about eight years ago he first felt pain in the affected hip, for which a surgeon to whom he applied, also recommended rest, at the same time opening two large abscesses (which have now degenerated into sinuses) and letting out a large quantity of matter. The pain has continued more or less ever since. The hip-joint is nearly anchylosed, but the patient complains of no particular fixed pain in any part of the limb. The thigh of the same side is enlarged, but there is no perceptible difference in the length of the two limbs. He was ordered half a pint of the compound decoction of sarsaparilla, with two drachms of the extract of sarsaparilla daily, and one-eighth of the oxymuriate of mercury in a pill. This plan of treatment (according to Sir B. BRODIE'S usual method) will be persevered in for some time, to produce an effect on the constitution.

Oct. 9. The patient has steadily persevered in the use of the remedies until this day, when the oxymuriate of mercury having deranged his bowels, it was discontinued *pro tempore*, and he was ordered the *Infusion of Casparia* with *Tincture of Kino*, twice or three times daily.

21. He has continued the medicines with much benefit. The diarrhœa is better, and there having been some sero-purulent discharge from one of the sinuses, Sir B. BRODIE laid open a fresh abscess at the upper and outer part of the thigh, from which blood, pus, and putrid coagulum, were discharged. A poultice was ordered to be applied, and the sarsaparilla medicines to be continued. The man's countenance is pallid, unhealthy, and anxious.

DISLOCATION OF THE RADIUS.—A little boy was admitted with this injury about four months since under the care of Mr. KEATE. The accident occurred from his being thrown from a pony. He was brought to the hospital about a fortnight after the accident had occurred, and Mr. KEATE first tried to reduce the dislocation over his knee, but failed. Several other attempts were made, by manipulation, and extension with towels, at various times, but all of them failed; and after the boy had been in the hospital upwards of a month, a consultation was held as to the propriety of making further attempts, and decided in the affirmative. The boy was then ordered to take nauseating doses of tartar emetic, and to be bled. Neither of these directions, however, was complied with, as he left the hospital, though he returned again on the following day. We then examined the arm (the left) and found the radius dislocated backwards, upon the condyle of the humerus, with much thickening of the parts around, some ligamentous adhesions having, probably, formed around the displaced head of the bone, to such an extent as effectually to prevent reduction. Our prognosis was verified on the boy being again brought into the operating theatre. Extension by pulleys was steadily made for five minutes, but the bone did not move. A towel was then passed over the humerus, to hold it as a fixed point backwards, and the fore-arm being half flexed, the bones were drawn away from the joint in a similar manner, while Mr. KEATE, by manipulation and rotation, endeavoured to move the bones, but to no purpose; some ligamentous adhesions were broken down, but the head of the bone did not move from its abnormal situation. A bandage and a bent splint were then put on the arm, and the boy left the hospital with his father.

WANT OF APPARATUS.—We take this opportunity of remarking that there exists no mechanism in the operating theatre for the reduction of dislocations. One staple only was driven into the wall on this occasion, and that proved to be of no use whatever. The physical force of arms, legs, and towels, was therefore employed. Mr. KEATE and Mr. BABINGTON were antagonists to Mr. HAWKINS, but their strength was soon exhausted. The board-room is the spot generally fixed upon for reducing dislocations, but it was the weekly board-day, and it was not deemed advisable to trouble any of the gentlemen who assemble on these occasions, with an exhibition so well calculated to shake their nerves.

CONGENITAL OSTEO-SARCOMATOUS TUMOUR.—A patient was admitted some time since under the care of Mr. Hawkins, with this species of tumour affecting the external condyle of the left ulnar (congenital, so far, we understood), and the first and second phalanges of the ring-finger of the same side. The finger being removed, Sir B. BRODIE observed, that he had met with a precisely similar case, in which the tumour near the olecranon had been congenital, and the tumours of the finger had supervened, as in the present case. The man has gone on well since. He was very restive during the operation, and something more than a common chair was required to restrain him, but was not obtained.

INJURY OF THE HEAD.

William Rose was brought into the admission-room, Sept. 16, to be admitted un-

der the care of Sir B. Brodie. The patient's countenance was extremely idiotic, and had the appearance of his having just recovered from an epileptic fit. The only account then obtainable was, that he had been shot in the head, and he was observed to have a drawing back of the head. In consequence of his distressed appearance he was immediately sent to one of the upper wards to bed. On making some further inquiries into the history of the case, it appeared that about a month since he had been shot in the back of the head over the occipital region, and that some of the shot had been extracted by a medical gentleman who attended him. He has now but little power over his lower limbs; the senses of sight and hearing are very much impaired, and he complains of great pain over the whole region of the head. He was immediately ordered calomel and opium.

Sept. 23. Sir B. Brodie saw him to-day, and ordered the medicines to be continued; a blister to be applied over the back of the neck, and kept open by the green savine cerate.

25. He is quite amaurotic, and his sense of hearing is still very imperfect. The drawing back (opisthotonos of the head), which was very great when he was admitted, to-day is somewhat less; the blister has discharged freely, but by some mistake it has been dressed with savine and mercurial ointment mixed, and this double mercurialization of the system by blister externally, and the calomel internally, has affected the mouth, and his gums are red and spongy. The head was ordered to be shaved, and the present blister to be dressed and healed, and another put on higher up over the occiput, and kept discharging with savine cerate only. The calomel and opium, which had been given three times a day, were ordered to be given only once daily.

Sir Benjamin Brodie remarked that this case was a very interesting one, and requested his clinical clerk to keep an account of it. In all those cases of injury to the brain, in which opisthotonos had been remarked, in which he had witnessed the post-mortem examination, there had been found a collection of pus about the tuberculum annulare and medulla oblongata. "I have seldom (he continued) observed loss of vision in these cases, but as it is now said that the optic nerves can be traced as far back as the corpora quadrigemina (the testes), and as these parts are all situated near one another, it is but fair, I think, to conclude that there is some deposition of pus in this case. I remember one case of injury of the head in which there was loss of sight, where, after death, there was found a transverse fracture of the bones at the base of the cranium, and the optic nerves were discovered to press on the sphenoid bone. Loss of the other senses may be present after these injuries, without at all increasing the danger or affecting the recovery of the patient. I have known the patient to be stone deaf and recover; and I have known the nerves of taste to be so vitiated, that sweet things would taste sour, and bitter things sweet, and yet the patients have recovered."

Oct. 2. The same treatment is persevered in, and with very good results. The deafness is less and the amaurosis diminishing. The opisthotonos is nearly gone.

Oct. 10. Since our last report he has had rather a severe epileptic fit, the peculiar phenomena of which it baffled the nurse's skill to describe. He was bled, and took calomel and Epsom salts to affect the bowels, which have been very sluggish. The "head" symptoms remain much the same, without any progressive amendment.

20. He has had frequent returns of epilepsy, for the relief of which Sir Benjamin ordered him to be put on full diet for a few days, but without, as may be supposed, producing any sort of influence on the attacks. His other symptoms are much the same,—certainly not better. The sphincters ani and vesicæ are relaxed; as the nurse says, "he does everything under him." Sir Benjamin thinks that the disease is beyond the reach of medicine, and looks to the pathology of the case with interest.

The refusal of Mr. Liston to accept the Chair of Surgery in the University of Edinburgh, does not appear to have been by any means satisfactory to the feelings of some of the magnates in modern Athens. In reply to an article which appeared in the Scotchman of last week, the London *Courier* evening paper, of Dec. 19, wrote as follows:—

"The notice which our worthy contemporary the *Scotsman* has taken of an article in last Saturday's *Courier*, relative to the recent appointment of Sir Charles Bell to the Chair of Surgery in the University of Edinburgh, as well as the remarks made upon that article in the Town Council of Edinburgh by one of the members, render it indispensably necessary for us to reassert the accuracy, to the very letter, of that part of the article in the *Courier*, in which it is stated that "as soon as it was ascertained, by reference to Mr. Liston, who has lately settled in the metropolis, that he would not forego his prospects in London for any of the medical chairs in the University of Edinburgh," the members of the Edinburgh Council resolved to elect Sir C. Bell.

"Mr. Liston, we have reason to believe, received the first intimation of its being the

wish of certain members of the Council to bestow the vacant Chair on him, when he was recently in Edinburgh, to which he had been called soon after the death of Professor TURNER, to perform an operation of no trifling description. The truth of our assertion, however, does not depend on verbal conversations, but on the unerring testimony of written documents, which passed between members of Council and Mr. LISTON, and which have been in our hands.

"Sir CHARLES BELL's friends seem to us to have acted injudiciously, and to have shown more sensitiveness than discretion in originating this discussion. Whatever may be the respective merits of Sir CHARLES BELL and Mr. LISTON, we certainly never meant to institute, in the columns of the *Courier*, any comparison between these eminent professional men, either as public teachers or as skilful and able surgeons. We merely stated facts known to us, and whatever might have been our private opinion as to the result of the election, had Mr. LISTON as well as Sir C. BELL been in the field, we neither assumed nor insinuated that Mr. LISTON would necessarily have been elected to the chair, had he been willing to accept it. His decided refusal made the election of Sir CHARLES BELL "the fittest individual, who was willing to accept the situation," unanimous, and of course without *opposition*.

"We are surprised that the report of the Town Council proceedings on this occasion, does not contain what was said by one of the members of the Town Council, in answer to the speech remarking on the article in this Journal, nor other details of the discussion which we understand took place. We hope that at the next meeting of Council, the Member of Council to whom we have alluded, will produce Mr. LISTON's letter to him, declining to be a candidate for the Chair."

In the press, and speedily will be published by John Murray, Albemarle-street, "Oratio ex Harveii Instituto, habita in ædibus Collegii Regalis Medicorum Die Junii 25, 1835, Ab HENRICO HALFORD, Regis et Reginæ Medico, præside."

Clinical Illustrations of the more Important Diseases of Bengal, with the Result of an Inquiry into their Pathology and Treatment. By William Twining, M.R.C.S.L. Second Edition, two vols., 8vo. Calcutta. Parbury and Co., London, 1835.

CORRESPONDENTS.

WE must use the letter from *St. George's Hospital*, respecting the ——— Street School, for our private information. We cannot publish it without permission to append the name of the writer. The anxiety to obtain pupils at new establishments, is not unlikely to lead to many concessions of gratuitous admissions at the outset of their career.

T. H. B. The paper will be inserted. Our arrangements have not hitherto allowed it to appear. In the proposed communications, brevity should, where it can usefully, be observed.

We have not yet had time to consider the propositions contained in the letter signed *A Consulting Surgeon*.—nor yet to peruse some long communications from correspondents both in town and country, forwarded for insertion in our columns.

The proposition of a *King's College Student* could not, we are sure, be carried into effect without loss to the speculator,—at least not at present. We could cite numerous instances in proof of the correctness of this opinion.

METEOROLOGICAL REPORT.

(*Extract from a Meteorological Journal kept at High Wycombe.*)

Days.	Thermometer.		Barometer.		Rain.	Wind.	Weather.
	Highest.	Lowest.	Highest.	Lowest.	Ins. Dcls.		
Dec. 7	36.25	28.25	29.89	29.88	—	N.E.	
8	37.	33.25	.84	.54	0.125	N.W.	The whole of the week fine and
9	26.25	38.	.84	.57	—	N.W.	
10	30.	16.50	30.10	30.03	—	E.	seasonable, with rain on the
11	29.50	17.50	.03	29.97	—	S.E.	
12	33.50	26.	.05	30.02	—	N.E.	8th.
13	37.50	26.50	.05	.05	—	E.	

Dec. 15th, 1835. W. JACKSON.